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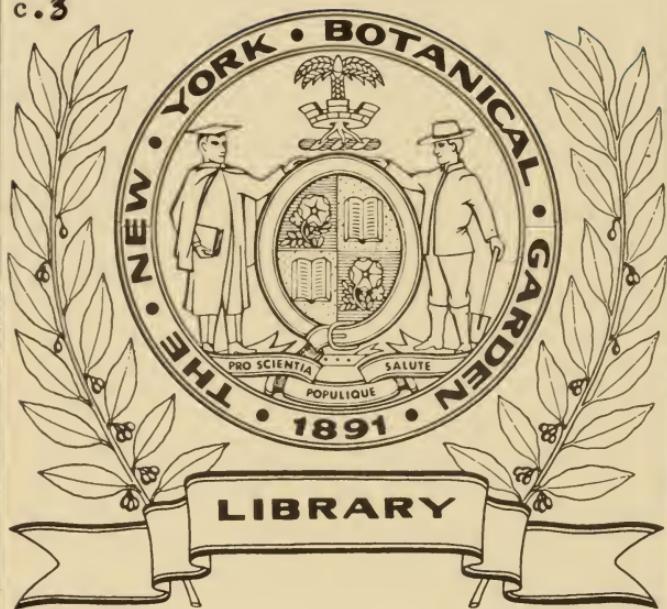
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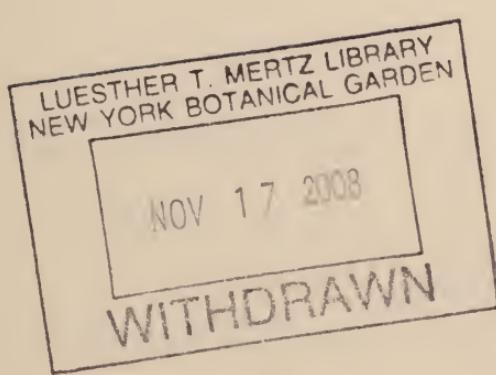
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Vermont Botanical Club

Flora of Vermont:
List of Ferns and Seed
Plants growing without
Cultivation

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UNIVERSITY OF VERMONT
AND STATE AGRICULTURAL COLLEGE

VERMONT AGRICULTURAL
EXPERIMENT STATION
BURLINGTON, VT.

BULLETIN NO. 187

APRIL, 1915

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List of Ferns and Seed Plants growing without
Cultivation

Prepared by Vermont Botanical Club

BURLINGTON, VT.:
FREE PRESS PRINTING COMPANY,
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BULLETIN 187: FLORA OF VERMONT

List of Ferns and Seed Plants Growing Without Cultivation

PREPARED BY VERMONT BOTANICAL CLUB

INTRODUCTION

The Vermont Botanical Club issued their first edition of the State Flora in 1900. During the fifteen years that have since elapsed there has been marked botanical activity, not only among the members of the Vermont Club, but among professional students of the northeastern United States. The two standard manuals for this region—the Gray Manual and the Britton and Brown Illustrated Flora—have during this period appeared in carefully revised editions, that present many additional species and numerous changes in nomenclature.

Some four years ago the Vermont Botanical Club appointed a committee to prepare a revised edition of the State Flora, consisting of W. W. Eggleston of the Bureau of Plant Industry, Washington, D. C., George L. Kirk of Rutland, and J. G. Underwood of Hartland. These gentlemen have labored with diligence and enthusiasm, and have had the cooperation of the active members of the Club. The result of their labors is presented in this new edition of the Vermont Flora.

A special effort has been made to report with more thoroughness the distribution of plants in eastern Vermont. When the former edition was prepared there was no working botanist in that part of the State. The editors were dependent for information chiefly upon the herbarium of Mr. C. C. Frost of Brattleboro (who died in 1880) and upon Prof. Henry G. Jesup's Catalogue of Flowering Plants found within thirty miles of Hanover, N. H., covering a tract fully half of which is in Vermont. As an indication of the help that has since come to hand may be mentioned:

1. The herbarium of Dr. F. Blanchard, now in the Fairbanks' Museum.
2. A list of plants found in eastern Vermont by Mr. W. H. Blanchard.
3. A similar list prepared by the Hartland Nature Club.
4. A list prepared by Mrs. Mack and Miss Strong of Woodstock.
5. A list of the West River Valley plants by Lester A. Wheeler of Townshend.
6. The plants of St. Johnsbury and vicinity by Miss Bridget M. Rooney.

Also for northern Vermont invaluable aid has been given by the admirable reports on the Flora of Willoughby by Dr. Geo. G. Kennedy (Rhodora 6: 91-134, June, 1904), and on the Flora of Burlington and

vicinity in 1911 by Mrs. Nellie F. Flynn. Other botanists from without the State have found the Green Mountains attractive hunting ground for rare plants, and have published lists that have been of great assistance in the preparation of the new edition. To these and to all helpers, whether lovers of plant life in Vermont or members of the goodly fraternity of professional botanists, the committee would gratefully acknowledge their indebtedness.

In the present catalogue all names of species, varieties, and formae are printed in boldface type; and for two special reasons this list follows the nomenclature of the revised Gray Manual. First, the great majority of the members of the Vermont Botanical Club use this manual, as more convenient to handle and less expensive than the Illustrated Flora; and secondly, the committee believe, that, whatever might be their personal opinion when these two authorities differ regarding the proper name for a species, it would be confusing and obtrusive to follow now the one authority and now the other. They therefore decided to continue the practice adopted in the former edition, and when the two authorities give different names, to print after the Gray Manual name the Britton and Brown name in parenthesis, and to include all such synonyms in the index. Unfortunately these synonyms, as may be seen by comparing the two editions of the Vermont Flora, are far more numerous in the second edition than in the first; so that the proposed efforts at uniformity have not as yet met with marked success.

The synonymy has also been largely increased along a different line—by the free introduction of English names, in accordance with the growing practice of all our manuals. The greatly diminished study of Greek and Latin even in our universities, and the keen popular interest in the study of Natural History have made the old technical names of species to many meaningless and embarrassing; and the demand for "English names," in spite of their frequent ambiguity—it would seem—must needs be met. From these two causes the synonyms in the index have been more than doubled.

But the technical names printed in darker type have also been increased from two causes:—First, more careful and extended explorations have disclosed forms of plant life in Vermont not before recognized; and secondly, our expert authorities, especially in New England, have become more keen-sighted and more disposed to distinguish, as species or varieties, forms that before had passed under one name. In these two ways alone the total number of names of

species, varieties, forms and hybrids (barring all synonyms) has been increased from 1,563 in the former edition to 2,006 in the present edition. For the Pteridophyta (the Ferns and their Allies), and for the three largest families and seven of the more critical genera of Seed-plants we obtain the following instructive record:—

SPECIES*	NUMBER OF NAMES IN THE LIST OF 1915, OF 1900					PER CENT. OF INCREASE	
	SPECIES*	VAR.	SUB. VAR.	HYBRIDS	TOTAL	TOTAL	PER CENT. OF INCREASE
All Families	1,694	130	133	65	2,022	1,562	29 1/3
Pterodophyta ...	73	10	29	16	128	81	58
Cyperaceæ	162	37	17	3	219	192	14
Compositæ	181	13	29	1	224	171	31
Graminæ	151	7	7	0	165	130	27
Carex	111	35	8	3	157	135	16
Cratægus	28	5	11	0	44	7	528 1/2
Viola	23	2	0	16	41	16	156
Rubus	17	1	0	15	33	16	106
Panicum	27†	1	0	0	28	19	47
Scirpus	22	1	6	0	29	20	45
Juncus	19	6	0	0	25	15	67

*When a species is represented in the State by a variety only, it is counted as a species and not as a variety.

†Including three species transferred to *Digitaria* and *Echinochloa*.

In the edition of 1900 three "Supplementary Lists" were given of plants reported in earlier Vermont catalogues, but omitted because no corroborative specimens could be found. It was anticipated that many of these species would be rediscovered; and so it has proved. In such cases the names have been inserted in the present edition; and as these lists have largely served their purpose, they are not republished. But an interesting paper might be written on the tasks undertaken to release certain of these species from the purgatory into which they were thrust by the compilers of the list published in 1900.

One other supplementary list in our last edition calls for a brief comment—a list, largely conjectural, of plants that have been introduced into Vermont from other parts of the United States. There is no practical difficulty in distinguishing, for a region as large as that covered by the Gray Manual, plants that are indigenous from those that have come in through man's agency from Eurasia or tropical America—those whose names are printed in the Gray Manual with small capitals. But it is a different problem to separate, for a region as small as Vermont, plants indigenous to the State from those that have been introduced from without. In some instances there can

be no reasonable doubt that the species has been recently naturalized from another State. The common Locust (*Robinia Pseudo-Acacia*), the greenhouse and garden pest *Oxalis repens*, the three species of *Phlox*—*P. paniculata*, *P. stolonifera*, and *P. subulata*—are examples; and a score or more might be cited. But one familiar with the localities in which such species occur, as *Myosotis arvensis*, *Chenopodium capitatum*, *Mimulus moschatus*, may not say with confidence that they have in all instances been introduced into Vermont. The solution of such a problem must be deferred, at least till our knowledge of the distribution of the species and of its constant environment is well nigh complete.

The publication of the revised Flora is made under the auspices of the Vermont Experiment Station, and under the direction of Dr. George P. Burns, Secretary of the Vermont Botanical Club, and Professor of Botany in the University of Vermont. Much of the editorial work has been in charge of Mrs. Nellie F. Flynn of Burlington, and Dr. Brainerd has assisted in the proof-reading and in the preparation of the index.

For a clear understanding of the text the following explanations should be kept in mind.

1. All preferred names of species and varieties are printed in boldface type, including foreign plants, or those not indigenous to the territory covered by the Britton and Brown Illustrated Flora or the Gray Manual. These foreign plants, however, are designated in the Vermont Flora by an asterisk placed after the specific or varietal name.

2. After the name in boldface type is given in parenthesis any synonym preferred by Dr. Britton in the Illustrated Flora, and in some instances a synonym that was used in the previous edition of the Vermont Flora.

3. In indicating the degree of frequency of occurrence, four adjectives have been used with a careful attempt at precision, namely, "common," "frequent," "occasional," "rare." In each case this statement regarding frequency is to be associated with the accompanying statement regarding habita—thus "sandy soil, common" means common on sandy soils; and such a plant may be rare in other habitats. Where they are abundant in such stations the word "local" has been preferred. In cases where but five stations or less were known, there have been enumerated, the name of the collector following in parenthesis.

4. The usage of the Gray Manual has been observed in giving a separate paragraph or line to a marked variety; while a subordinate variety or a form has been noted in the same paragraph with the type.

5. When a hybrid has received a special name, that name has been first given in the list, preceded by the sign x and followed in parenthesis by the usual formula indicating the accredited parentage of the hybrid. Only 65 spontaneous hybrids have been listed for Vermont.

EZRA BRAINERD,
President of the Vermont Botanical Club.

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FLORA OF VERMONT

PTERIDOPHYTA. FERN PLANTS

POLYPODIACEAE. FERN FAMILY

ADIANTUM. Maidenhair

A. pedatum L. Rich moist woods; common.

ASPIDIUM. (DRYOPTERIS). Shield Fern

X **A. Boottii** Tuckerm. (*A. cristatum* x *spinulosum*, var. *intermedium*).
Boott's Shield Fern. Wet thickets and about ponds; occasional.

A. cristatum (L.) Sw. Crested Shield Fern. Moist thickets and swamps; frequent.

A. cristatum (L.) Sw., var. **Clintonianum** D. C. Eaton. (*D. Clintoniana* [D. C. Eaton] Dowell). Clinton's Shield Fern. Swampy woods; frequent.

A. Filix-mas (L.) Sw. Male Fern. Hartland, (Nancy Darling); Woodstock and Bridgewater, (Mabel A. Strong); Barnard, (Miss F. E. Corne); Brandon, (Kirk and Dutton). Forma **incisum** Clute. Brandon, (Kirk and Dutton).

A. fragrans (L.) Sw. Fragrant Fern. Mt. Mansfield, Camel's Hump, and Bolton Notch, (Pringle); Mt. Zion, Hubbardton, (Ross and Eggleston).

A. Goldianum Hook. Goldie's Fern. Rich moist woods; occasional.

A. marginale (L.) Sw. Marginal Shield Fern. Rocky woods; common.
Var. **elegans** J. Robinson. Swampy woods; occasional.

A. noveboracense (L.) Sw. New York Fern. Moist woods and swamps; common.

X **A. pittsfordense** (Slosson) Eastman. (*A. marginale* x *spinulosum*).
Pittsford, (Margaret Slosson); Hartland, (Nancy Darling).

A. simulatum Davenp. Massachusetts Fern. Rare. Brattleboro, (Mrs. F. B. Horton); Hartland, (Mrs. Hurd).

A. spinulosum (O. F. Müller) Sw. Spinulose Shield Fern. Damp woods; occasional.

A. spinulosum (O. F. Müller) Sw., var. **dilatatum** (Hoffm.) Gray, forma **anadenium** Robinson. (*D. dilatata* [Hoffm.] Gray). Broad Shield Fern. Mountain woods; common above 2,500 feet altitude.

A. spinulosum (O. F. Müller) Sw., var. **intermedium** (Muhl.) D. C. Eaton.
(*D. intermedia* [Muhl.] Gray). Woodlands; common.

A. Thelypteris (L.) Sw. Marsh Fern. Swamps and wet places; common.

Additional Hybrid Forms

A. cristatum x **cristatum**, var. **Clintonianum**. In tracts where plants of the species and its variety are numerous intermediate forms are usually frequent.

A. cristatum x marginale. Pittsford, (Margaret Slosson).

A. cristatum x spinulosum. Middlebury, (Brainerd).

A. cristatum, var. Clintonianum x Goldianum. Middlebury, (Brainerd 1879).

A. cristatum, var. Clintonianum x marginale. Pittsford, (Margaret Slosson); Middlebury, (Brainerd).

A. cristatum, var. Clintonianum x spinulosum. Middlebury, (Brainerd); Pittsford, (Margaret Slosson).

A. cristatum, var. Clintonianum x spinulosum, var. intermedium. Middlebury, (Brainerd); Montgomery, (Mary L. Gates).

A. Filix-mas x marginale. North Bridgewater, (Winslow); Barnard, (Miss F. E. Corne); Brandon, (Underwood).

A. Goldianum x marginale. Leicester, (Brainerd); Cavendish, (Rugg).

A. Goldianum x spinulosum, var. intermedium. Middlebury, (Brainerd 1879).

A. marginale x spinulosum, var. intermedium. Orleans, (Winslow).

A. spinulosum x spinulosum, var. intermedium. Where numerous plants of species and variety grow together, intergrading forms are not infrequent.

ASPLENIUM. Spleenwort

A. acrostichoides Sw. (*A. thelypteroides* Michx.; *Athyrium thelypteroides* [Michx.] Desv.). Silvery Spleenwort. Rich woods; frequent.

A. angustifolium Michx. (*A. pycnocarpon* Spreng.). Narrow-leaved Spleenwort. Rich moist woods; occasional. North in the Connecticut Valley to St. Johnsbury.

X A. ebenoides R. R. Scott. (*Asplenium platyneuron* x *Camptosorus rhizophyllus*). Scott's Spleenwort. On limestone; rare. Rutland, (G. H. Ross); Pittsford, (Grace A. Woolson); Brandon, (Dutton); Salisbury, (Dr. H. H. Swift); Proctor, (Kirk).

A. Filix-femina (L.) Bernh. (*Athyrium Filix-foemina* [L.] Roth). Lady Fern. Moist woods; common. A variable species with many described forms.

A. platyneuron (L.) Oakes. (*A. ebeneum* Ait.). Ebony Spleenwort. Rocky woods; frequent. North in the Connecticut Valley to St. Johnsbury. Var. *incisum* (E. C. Howe) Robinson. (*A. ebeneum*, var. *Hortonae* Davenp.). With type; rare. Brattleboro, (Mrs. F. B. Horton); Pittsford, (Katherine A. French). Var. *serratum* (E. S. Miller) BSP. With type; rare. Pittsford, (Grace A. Woolson).

A. Ruta-muraria L. Rue Spleenwort. Limestone cliffs of western Vermont; occasional. Lake Willoughby, (E. Faxon).

A. Trichomanes L. Maidenhair Spleenwort. Shaded cliffs; frequent. Var. *incisum* Moore. Brattleboro, (Frost, Annie L. Grout); Norwich, (Jesup); Pittsford, (Rugg).

A. viride Hudson. Green Spleenwort. Cliffs, Mt. Mansfield and Camel's Hump, (Pringle); Mt. Hor, Westmore, (Mrs. Condit); Plymouth Notch, (Mabel A. Strong).

A. Trichomanes x Ruta-muraria. Proctor, (Grace A. Woolson).

CAMPTOSORUS. Walking Leaf

C. rhizophyllus (L.) Link. Walking Fern. Shaded rocks, especially limestone; locally common in western Vermont. Plymouth Notch, Hartland, Brattleboro, Williamstown, Norwich and Windsor in the Connecticut Valley.

CRYPTOGRAMMA. Rock Brake

C. Stelleri (Gmel.) Prantl. (*Pellaea gracilis* Hook.). Slender Rock Brake. Moist limestone rocks; occasional. Hartland, Quechee Gulf, East Barnet and St. Johnsbury in eastern Vermont.

CYSTOPTERIS. (FILIX). Bladder Fern

C. bulbifera (L.) Bernh. Common Bladder Fern. Moist shaded ravines and cliffs; frequent.

C. fragilis (L.) Bernh. Fragile Bladder Fern. Rocky woods and ravines; common.

DICKSONIA. (DENNSTAEDTIA)

D. punctilobula (Michx.) Gray. (*D. pilosiuscula* Willd.). Hay-scented Fern. Hilly pastures; common. Forma **cristata** (Maxon) Clute. With the type; occasional.

ONOCLEA

O. sensibilis L. Sensitive Fern. Moist places; common. Var. **obtusilobata** (Schkuhr) Torr. With type; occasional.

O. Struthiopteris (L.) Hoffmann. (*Matteuccia Struthiopteris* [L.] Todaro). Ostrich Fern. Rich alluvial soil; common. A form similar to the var. *obtusilobata* of *O. sensibilis* has been found in Dorset, (Mrs. E. H. Terry).

PELLAEA. Cliff Brake

P. atropurpurea (L.) Link. Purple Cliff Brake. Limestone cliffs; occasional in western Vermont. Mt. Willoughby and Quechee Gulf in eastern Vermont. Var. **Bushii** Mackenzie. Essex Junction, (C. E. Faxon); Burlington, (Blake); West Haven, (Kirk).

PHEGOPTERIS. (DRYOPTERIS). Beech Fern

P. Dryopteris (L.) Fée. Oak Fern. Moist woods and swamps; common.

P. hexagonoptera (Michx.) Fée. Broad Beech Fern. Rich woods; occasional. North in the Connecticut Valley to St. Johnsbury.

P. polypodioides Fée. (*D. Phegopteris* [L.] C. Chr.). Long Beech Fern. Damp woods; common.

POLYPODIUM. Polypody

P. vulgare L. Rocks; common. Var. **attenuatum** Milde. Brattleboro, (Addie L. Reed). Var. **auritum** Willd. Mt. Horrid, (Dutton). Var. **cambricum** (L.) Willd. Rutland, (Kirk); Montgomery, (Mary L. Gates).

POLYSTICHUM

P. acrostichoides (Michx.) Schott. (*Aspidium acrostichoides* Sw.). Christmas Fern. Rocky woods; common. Var. **incesum** Gray. (*Aspidium acrostichoides*, var. *incisum* Gray; *Polystichum acrostichoides*, var. *Schweinitzii* Small). Rhod. 11: 35. Dry wooded hillsides; frequent. Crisped and crested forms occur.

P. Braunii (Spennner) Fée. (*Aspidium aculeatum*, var. *Braunii* Döll.). Braun's Holly Fern. Moist woods above 1500 feet altitude; occasional.

PTERIS. (PTERIDIUM). Brake or Bracken

P. aquilina L. Pastures and open woods; common. Var. **pseudocaudata** Clute. Burned over place, Colchester, (F. A. Ross).

WOODSIA

W. alpina (Bolton) S. F. Gray. (*W. hyperborea* R. Br.). Alpine Woodsia. Mt. Mansfield and Willoughby, (Pringle); Quechee Gulf, (Balch).

W. glabella R. Br. Smooth Woodsia. Willoughby Lake, (Torrey); Mt. Mansfield and Bakersfield Ledge, (Pringle); Quechee Gulf, (Balch); Mt. Horrid, Rochester, (Dutton).

W. ilvensis (L.) R. Br. Rusty Woodsia. Rocks; common.

W. obtusa (Spreng.) Torr. Blunt-lobed Woodsia. Rocky banks and calcareous ledges; occasional. In Connecticut Valley north to St. Johnsbury.

WOODWARDIA. (ANCHISTEA). Chain Fern

W. virginica (L.) Sm. Virginia Chain Fern. Fort Ethan Allen pond, (Robbins); Franklin bog, (Wild); Rutland, (Kirk).

OSMUNDACEAE. FLOWERING FERN FAMILY

OSMUNDA. Flowering Fern

O. cinnamomea L. Cinnamon Fern. Wet woods and pastures; common. Forma **bipinnatifida** Clute. Fern Bull. 15: 17. Williston, (Blake). Forma **frondosa**, (T. & G.) Britton. With the type; occasional. Forma **incisa** (Huntington) Gilbert. With the type; occasional. Forma **latipinnula** Blake. Rhod. 15:155. Swanton, (Blake). A crimped form occurs.

O. Claytoniana L. Interrupted Fern. Wet woods and pastures; common. Var. **dubia** Grout. Newfane, (Grout).

O. regalis L. Royal Fern. Wet woods and swamps; common. Forma **interrupta** Milde. Swanton, (Blake). Forma **orbiculata** Clute. Hartland, (Ruggles). An incised form occurs.

OPHIOGLOSSACEAE. ADDER'S TONGUE FAMILY

BOTRYCHIUM. Moonwort

B. lanceolatum (Gmel.) Angstroem, var. **angustisegmentum** Pease & Moore. Lance-leaved Grape Fern. Moist hollows in cool open woods; rare.

B. Lunaria (L.) Sw. Moonwort. Very rare. Willoughby House, Westmore, (G. H. Tilton).

B. obliquum Muhl. (B. ternatum forma obliquum Milde). Grape Fern. Moist gravelly slopes; frequent. Var. **dissectum** (Spreng.) Clute. (B. dissectum Spreng.). Cool loamy soil, open fields; occasional. Var. **oneidense** (Gilbert) Waters. Vermont, Miss Gilman, Gray's Manual ed. 7.

B. ramosum (Roth) Aschers. (B. matricariaefolium A. Br.; B. neglectum Wood). Rich moist woods; occasional.

B. simplex E. Hitchcock. Little Grape Fern. Hilly pastures and open woods; occasional. Var. **compositum** (Lasch) Milde. Hartland, (Nancy Darling); St. Johnsbury, (Bridget M. Rooney).

B. ternatum (Thunb.) Sw., var. **intermedium** D. C. Eaton. (B. silaefolium Presl.). Ternate Grape Fern. Old pastures and copses; occasional. Var. **rutaefolium** (A. Br.) D. C. Eaton. (B. matricariae Spreng.). Old fields; rare.

B. virginianum (L.) Sw. Rattlesnake Fern. Rich woods; common.

OPHIOGLOSSUM. Adder's Tongue

O. vulgatum L. Moist meadows and pastures; occasional.

EQUISETACEAE. HORSETAIL FAMILY

EQUISETUM. Horsetail

E. arvense L. Common Horsetail. Moist gravelly or sandy banks; common.

E. fluviatile L. (E. limosum L.). Pipes. Shallow water with muddy bottom; common. A form with the branches bearing numerous small spikes occurs, Burlington, (Mrs. N. F. Flynn).

E. hyemale L., var. **affine** (Engelm.) A. A. Eaton. Common Scouring Rush. Moist gravelly banks; common. Forma **polystachyum** Prager. Burlington, (Blake).

E. hyemale L., var. **intermedium** A. A. Eaton. Scouring Rush. Moist sandy soil, Burlington, (Howe).

E. litorale Kühlein. Shore Horsetail. Gravelly shores of Lake Champlain; rare.

E. palustre L. Marsh Horsetail. Wet sandy shore of Lake Champlain, Burlington, (Pringle); Brandon, (Dutton); Windsor, (W. H. Blanchard, Rugg); Colchester, (Blake).

E. pratense Ehrh. Newark, (Kennedy); Brattleboro, (Wheeler).

E. scirpoides Michx. Moist cool woods; occasional.

E. sylvaticum L. Moist shady places; common.

E. variegatum Schleicher. Gravelly shores; occasional.

E. variegatum Schleicher, var. **Jesupi** A. A. Eaton. Wet shores; rare.
 Forma **geminatum** Blake. Rhod. 15:156. Essex Junction, (Blake).
 Forma **multirameum** Blake. Rhod. 15:156. Essex Junction, (Blake).

LYCOPODIACEAE. CLUB MOSS FAMILY

LYCOPODIUM. Club Moss

L. annotinum L. Cold woods; common. Var. **pungens** Desv. Summit Mt. Mansfield, (Pringle); Brighton, (W. H. Blanchard).

L. clavatum L. Common Club Moss. Dry woods; common. Var. **megastachyon** Fernald & Bissell. (Var. **monostachyon** Gray's Manual, ed. 7). Rhod. 12: 53. Dry woods; occasional above 1,000 feet altitude.

L. complanatum L. Willoughby, (Winslow and Rugg); Hartland, (Florence H. Sturtevant).

L. complanatum L., var. **flabelliforme** Fernald. Ground Pine. Dry pastures and open woods; common. Var. **Wibbei** Haberer. Westmore, (Kennedy); Brandon, (Dutton); Hartland, (Underwood).

L. inundatum L. Bog Club Moss. Moist soil; occasional. Var. **Bigelovii** Tuckerm. Sunderland, (Grout).

L. lucidulum Michx. Shining Club Moss. Cold damp woods; common.

L. lucidulum Michx., var. **porophilum** (Lloyd & Underwood) Clute. Cold ravine, Clarendon, (Kirk).

L. obseurum L. Tree Club Moss. Moist woods; occasional. In the Connecticut Valley north to St. Johnsbury.

L. obseurum L., var. **dendroideum** (Michx.) D. C. Eaton. Tree Club Moss. Moist woods; common.

L. sabinaefolium Willd. Dry woods and pastures; Rochester, (Eggles-ton); Willoughby, (Winslow and Rugg); Hartland, (Nancy Darling).

L. Selago L. Summits of Mansfield and Camel's Hump, (Robbins); Johnson, (Eggles-ton); Rochester, (Dutton).

L. Selago L., var. **patens** (Beauv.) Desv. Smugglers' Notch, (Pringle).

L. sitchense Rupr. Willoughby Mt., (Winslow and Rugg).

L. tristachyum Pursh. (*L. complanatum* L., var. *Chamaecyparissus* Milde). Dry woods and pastures; occasional.

SELAGINELLACEAE

SELAGINELLA

S. apus (L.) Spring. Creeping Selaginella. Moist shady places; Brattleboro, (Grout); Pownal, (Hazen).

S. rupestris (L.) Spring. Rock Selaginella. Dry exposed rocks; frequent. In the Connecticut Valley north to Barnet.

ISOETACEAE. QUILLWORT FAMILY

ISOETES. Quillwort

I. Dodgei A. A. Eaton. (*I. canadensis* A. A. Eaton). Firm soil, borders of ponds and streams; occasional.

I. echinospora Dur., var. **Braunii** (Dur.) Engelm. (*I. Braunii* Dur.).
Margins of ponds and streams; common.

I. echinospora Dur., var. **muricata** (Dur.) Engelm. (*I. Braunii* Dur.).
Mouth of Pompanoosuc River, Norwich, (Jesup).

I. macrospora Dur. Willoughby Lake, (Kennedy).

I. Tuckermani A. Br., var. **borealis** A. A. Eaton. Grout Pond, Stratton, (Eggleson and Grout).

SPERMATOPHYTA. SEED PLANTS

TAXACEAE. YEW FAMILY

TAXUS. Yew

T. canadensis Marsh. Ground Hemlock. Moist banks and hills; frequent.

PINACEAE. PINE FAMILY

ABIES. Balsam Fir

A. balsamea (L.) Mill. Cold, wet woods and swamps, in the higher altitudes; common. Not reported in the Connecticut Valley south of Hartland.

JUNIPERUS. Juniper

J. communis L., var. **depressa** Pursh. (*J. sibirica* Burgsd.). Common Juniper. Dry, sterile hills; frequent. In the Connecticut Valley, north to Peacham.

J. horizontalis Moench. (*J. Sabina* L., var. *procumbens* Pursh.). Manchester, (Mary A. Day).

J. virginiana L. Red Cedar. Dry, rocky hills; frequent in lower altitudes of western Vermont and north in the Connecticut Valley to Fairlee.

LARIX. Larch

L. laricina (Du Roi) Koch. Tamarack. Cold swamps; common, except in the lower Connecticut Valley.

PICEA. Spruce

P. canadensis (Mill.) BSP. (*P. alba* Link). White Spruce. Common in northeastern Vermont south to Strafford, West Fairlee and Newbury. Its western limit is a line drawn from Strafford through East Barre, East Montpelier, Craftsbury and Albany to Newport Center, (W. H. Blanchard); Hartland, (Nancy Darling); Newfane, spreading from cultivation, (Wheeler); Providence Island, common, (Jones); Thompson's Point, Colchester, (Griffin); Essex, (Howe).

P. mariana (Mill.) BSP. (*P. nigra* Link; *P. brevifolia* Peck). Swamp or Black Spruce. Common in sphagnum swamps of the Champlain

and upper Connecticut Valleys. Forma **semiprostrata** (Peck) Blake. Summit of Mt. Mansfield, (Eggleson).

P. rubra (Du Roi) Dietr. (*P. rubra* Link; *P. rubens* Sarg.). Red Spruce. Common, especially on rocky mountain sides.

PINUS. Pine

P. Banksiana Lambert. (*P. divaricata* Sudw.). Gray Pine, Jack Pine. Monkton, (R. E. Robinson); Starksboro, (Pringle); Fairfax, (Bates). But few trees at each station.

P. resinosa Ait. Red or Norway Pine. Dry, rocky soil; frequent.

P. rigida Mill. Pitch Pine. Barren, sandy soil. Common in the northern Champlain Valley and in the Connecticut River towns north to Wells River.

P. Strobus L. White Pine. Common up to 1000 feet altitude.

THUJA. Arbor Vitae

T. occidentalis L. Commonly but wrongly called White Cedar. Swamps and rocky banks; common in northern and central Vermont, occurring in eastern Vermont south to Hartland and Woodstock.

TSUGA. Hemlock

T. canadensis (L.) Carr. Rocky woods and swamps; common.

TYPHACEAE. CAT-TAIL FAMILY

TYPHA. Cat-tail

T. angustifolia L. Narrow-leaved Cat-tail. Marshes; occasional.

T. latifolia L. Common Cat-tail. Marshes; common.

SPARGANIACEAE. BUR-REED FAMILY

SPARGANIUM. Bur-reed

S. americanum Nutt. (*S. simplex*, var. *Nuttallii* Engelm.). Bogs and muddy shores. Burlington, (Mrs. N. F. Flynn); Fairfield Pond, (Blake).

S. americanum Nutt., var. **androcladum** (Engelm.) Fernald & Eames. (*S. simplex* Huds., var. *androcladum* Engelm.; *S. androcladum* [Engelm.] Morong.). Bogs and shallow water; common.

S. angustifolium Michx. Shallow water in mountain ponds; frequent.

S. diversifolium Graebner. (*S. simplex* Gray's Manual, ed. 6, in part). Marshy borders of ponds and streams; frequent.

S. diversifolium Graebner, var. **acaule** Fernald & Eames. (*S. acaule* [Beeby] Rydb.). Essex Junction, Hinesburg Pond, Williston, (Blake).

S. eurycarpum Engelm. Borders of ponds and rivers; frequent in western Vermont.

S. fluctuans (Morong) Robinson. (*S. androcladum* Morong, var. *fluctuans* Morong in part). Floating in ponds; occasional.

S. lucidum Fernald & Eames. Shore of Winooski River, near mouth, Burlington, (Blake).

S. minimum Fries. Marshy borders of ponds; occasional.

S. simplex Huds. Marshy borders of ponds and streams; frequent.

NAJADACEAE. PONDWEED FAMILY

NAJAS. Naiad

N. flexilis (Willd.) Rostk. & Schmidt. Slow streams and ponds; common.

POTAMOGETON. Pondweed

P. alpinus Balbis. (*P. rufescens* Schrad.). Windsor, (Jesup); Willoughby Lake, (E. Faxon); Lewis Creek, Ferrisburg, (E. & C. E. Faxon); Harvey's Pond, W. Barnet, (Blanchard); Little Averill Pond, (Eggleson).

P. americanus C. & S. (*P. lonchites* Tuckerm.). In sluggish streams; frequent.

P. amplifolius Tuckerm. Common in still water; fruiting more commonly at high altitudes.

P. angustifolius Berchtold & Presl. (*P. Zizii* Mertens & Koch). Alburg, (Morong); Milton, (Grout). Var. **connecticutensis** (Robbins) Benn. (*P. lucens* L., var. Robbins). Lake Dunmore, (E. Faxon); Lake Bomoseen, (Eggleson).

P. bupleuroides Fernald. (*P. perfoliatus* Gray's Manual, ed. 6, in part, not L.). Occasional in Lake Champlain.

P. confervoides Reichenb. (*P. Tuckermanii* Robbins). Grout Pond, Stratton, (Grout).

P. crispus* L. In shallow water, Lake Champlain and tributaries. Malletts Bay, (Griffin); Ferrisburg and Charlotte, (Dutton and Kirk).

P. dimorphus Raf. (*P. Spirillus* Tuckerm.). Common.

P. epiphydrus Raf. (*P. Nuttallii* C. & S.; *P. pennsylvanicus* Willd.). Still or flowing water; common.

P. epiphydrus Raf., var. **cayugensis** (Wiegand) Bennett. In Winooski River, Burlington, (Blake).

X P. Faxonii Morong. Abundant in the still water of Lake Champlain and tributaries.

P. filiformis Pers. (*P. marinus* auth., not L.?). In Lake Champlain, Charlotte, (Dutton and Kirk); West Haven, (Kirk).

P. foliosus Raf. (*P. pauciflorus* Pursh.). Lewis Creek, Ferrisburg, (C. E. Faxon); W. Barnet, (Blanchard); Brattleboro, (Grout); Woodbury, (Brainerd); Burlington and Colchester, (Mrs. N. F. Flynn).

P. foliosus Raf., var. **niagarensis** (Tuckerm.) Morong. Tributaries of Lake Champlain; occasional.

P. Friesii Rupr. (*P. mucronatus* Gray's Manual, ed. 6, not Schrad.?). Frequent.

P. heterophyllus Schreb. Still or flowing water; common. Forma **graminifolius** (Fries) Morong. Knight's Island, Lake Champlain,

(Brainerd). Forma **terrestris** Schlecht. Exsiccated places; frequent.

P. hybridus Michx. (P. *diversifolius* Raf.). "South Hero," (Robbins); "Brattleboro," (Frost); Vernon, (Grout); Willoughby, (Jesup).

P. lucens L. Ponds; local.

P. natans L. Pools and ditches; common.

P. Oakesianus Robbins. Grout Pond, Stratton; Lily Pond, Vernon, (Grout).

P. obtusifolius Mertens & Koch. Fairlee Lake, (Jesup and Sargent); Little Otter Creek, Ferrisburg, (Grout and Eggleston); Lewis Creek, (Faxon).

P. pectinatus L. Common.

P. perfoliatus L. Slow streams and shallow waters; frequent.

P. praelongus Wulf. In deep water; frequent.

P. pusillus L. Pools and ditches; common.

P. pusillus L., var. **Sturrockii** Benn. Malletts Bay, Lake Champlain, (Griffin).

P. pusillus L., var. **tenuissimus** Mertens & Koch. Occasional.

P. Richardsonii (Benn.) Rydb. (P. *perfoliatus*, var. *lanceolatus* Robbins). Lake Champlain and its tributaries; frequent.

P. Robbinsii Oakes. Common.

P. rutilus Wolfgang. Pelot's Bay, N. Hero, (Brainerd).

P. strictifolius Benn. (P. *pusillus*, var. *pseudo-rutilus* Benn.). Lake Champlain, (E. & C. E. Faxon); Orwell, (Cushman).

P. vaseyi Robbins. Oozy Pond, Barnet, (Blanchard).

P. zosterifolius Schumacher. (P. *compressus* L.). Still and slowly flowing water; common.

ZANNICHELLIA. Horned Pondweed

Z. palustris L. Shallow water, South Hero, (Robbins); North Hero, (Pringle); Norwich, (Jesup); Joe's Pond, W. Danville, (Blanchard).

JUNCAGINACEAE. ARROW GRASS FAMILY

SCHEUCHZERIA

S. palustris L. Peaty bogs; occasional.

ALISMACEAE. WATER-PLANTAIN FAMILY

ALISMA. Water-plantain

A. Plantago-aquatica L. (A. *subcordatum* Raf.). Swales in the lower altitudes; common.

SAGITTARIA. Arrow-head

S. arifolia Nutt. (S. *cuneata* Sheldon). Swales and wet shores; frequent along Lake Champlain; Barnard Pond, (Jesup and Sargent); Lake Bomoseen, (Dutton); Hartland, (Whiting); Willoughby Lake, (Kennedy).

S. graminea Michx. Low muddy shores of lakes and ponds; frequent.

S. heterophylla Pursh. (S. *rigida* Pursh.). Low muddy shores and in shallow water; frequent. Variable. Forma **fluitans** (Engelm.)

Blake. *Rhod.* 15:159. North Hero, (Brainerd); Lake Champlain, (C. E. Faxon); Swanton and Burlington, (Blake). Forma *rigida* (Pursh.) Blake. *Rhod.* 15:159. Alburg, (Pringle); Ferrisburg, (Brainerd); Shelburne and Colchester, (Blake).

S. latifolia Willd. (*S. variabilis* Engelm.). Wet places; common. Forma *diversifolia* (Engelm.) Robinson. (*S. brevirostra* Mack. & Bush.). With type; occasional. Forma *gracilis* (Pursh.) Robinson. With type; occasional. Forma *obtusa* (Muhl.) Robinson. With type; occasional.

HYDROCHARITACEAE. FROG'S BIT FAMILY

ELODEA. (PHILOTRIA). Water-weed

E. canadensis Michx. Slow streams and ponds; frequent.

VALLISNERIA. Tape Grass. Eel Grass

V. spiralis L. Quiet, shallow water with sandy bottom; common.

GRAMINEAE. GRASS FAMILY

AGROPYRON

A. caninum (L.) Beauv. Awned Wheat Grass. Dry, warm, rocky woodlands of the lower altitudes; frequent.

A. repens* (L.) Beauv. Couch, Quitch or Quick Grass. Fields and waste places; common.

A. tenerum Vasey. (*A. novae-angliae* Scribn.). Slender Wheat Grass. Willoughby Mt., Smugglers' Notch.

AGROSTIS. Bent Grass

A. alba L. White Bent Grass. Meadows and fields; common. Var. *vulgaris** (With.) Thurb. Red Top. Fields; common; dryer situations than type.

A. alba L., var. *aristata* Gray. Upland pastures; frequent.

A. alba L., var. *maritima* (Lam.) G. F. W. Mey. Damp shores, Burlington, (Mrs. N. F. Flynn).

A. borealis Hartm. (*A. canina* var. *alpina* Oakes). Summits of Mt. Mansfield and Camel's Hump, (Pringle).

A. hyemalis (Walt.) BSP. (*A. scabra* Willd.). Hair Grass. Dry ditches and desiccated places; common.

A. perennans (Walt.) Tuckerm. Thin Grass. Moist shaded places; frequent.

ALOPECURUS. Foxtail Grass

A. geniculatus L., var. *aristulatus* Torr. (*A. aristulatus* Michx.). Floating Foxtail Grass. Wet meadows; frequent.

A. pratensis* L. Meadow Foxtail Grass. Introduced in fields and along roadsides; "Bellows Falls," (Carey); Hartland, (Ruggles); Burlington, (Jones); Rutland, (Kirk); Newfane, (Wheeler).

AMMOPHILA

A. arenaria (L.) Link. (*A. arundinacea* Host.). Beach Grass. Sandy shore of Lake Champlain, Alburg, (Pringle).

ANDROPOGON. Beard Grass

A. furcatus Muhl. Forked Beard Grass. Dry, rocky banks of rivers and lakes; occasional in the lower altitudes.

A. scoparius Michx. (*Schizachyrium scoparium* [Michx.] Nash.). Broom Beard Grass. Dry, sterile soil; frequent.

ANTHOXANTHUM. Sweet Vernal-grass

A. odoratum* L. Moist fields and roadsides; common.

ARISTIDA. Triple-awned Grass

A. dichotoma Michx. Poverty Grass. Barren fields; Pownal, (Robbins); New Haven, (Pringle); Essex, (Mrs. N. F. Flynn).

A. gracilis Ell. Dry pastures; Vernon, (Grout).

ARRHENATHERUM. Oat-grass

A. elatius* (L.) Beauv. (*A. avenaceum* Beauv.). Tall Oat-grass. Charlotte, (Horsford); Burlington, (Jones); Rutland, (Kirk).

AVENA. Oat

A. fatua* L. East Wallingford, (Kent).

A. pubescens* Huds. Charlotte, (Pringle).

A. sativa* L. Cultivated and frequently escapes.

BRACHYELYTRUM

B. erectum (Schreb.) Beauv. Moist shaded places; frequent.

BRIZA. Quaking Grass

B. media* L. In old meadow, Charlotte, (Pringle); woods, near Evergreen Cemetery, Rutland, (Kirk).

BROMUS. Brome Grass

B. altissimus Pursh. Along Hoosic River, North Pownal, (Woodward); Brattleboro, (Wheeler); common along streams in northern part of the state.

B. arvensis* L. Windham, (W. H. Blanchard).

B. ciliatus L. Wood Chess, Hairy Brome Grass. Moist thickets; common.

B. erectus* Huds. Charlotte, (Pringle).

B. incanus (Shear.) Hitchc. Along Hoosic River, North Pownal, (Woodward).

B. inermis* Leyss. Hungarian Brome Grass. Burlington, (Orton); Colchester, (Griffin); Rutland, (Kirk); Highgate, (Blewitt).

B. Kalmii Gray. Wild Chess. Dry woodlands in the lower altitudes of western Vermont; occasional.

B. purgans L. Thickets; frequent.

B. racemosus* L. Charlotte, (Pringle).

B. secalinus* L. Chess. Occasional in fields and along railroads.

B. tectorum* L. Charlotte, (Pringle); along railroad, Rutland and Ferrisburg, (Kirk); Burlington, (Mrs. N. F. Flynn).

CALAMAGROSTIS. Reed Bent Grass

C. canadensis (Michx.) Beauv. Blue-joint Grass. Marshes and wet places; common.

C. hyperborea Lange. Lake Willoughby, (Boott). Specimen in U. S. national herbarium.

C. inexpansa Gray. (C. confinis Gray). Mt. Mansfield, (Pringle); Lake Willoughby cliffs.

C. Langsdorffii (Link.) Trin. Mt. Mansfield, (Pringle); Lake Willoughby, (Rusby).

C. neglecta (Ehrh.) Gaertner, Meyer & Scherb. (C. stricta Gray's Manual, ed. 6, not Trin.; C. hyperborea Lange., var. americana Kearney). Lake Willoughby, (Mann); Mt. Mansfield, (Pringle).

C. Pickeringii Gray. (C. breviseta Scribn.). Vermont, (Pringle). Specimen in U. S. national herbarium.

C. Pickeringii Gray, var. *lacustris* (Kearney) Hitchc. (C. Lapponica Gray in part; C. lacustris [Kearney] Nash). Mt. Mansfield, (Pringle). Specimen in U. S. national herbarium.

CENCHRUS. Sandbur

C. carolinianus Walt. Dry sandy soil; local. Colchester and Burlington, (Mrs. N. F. Flynn); Essex, (Griffin); along Connecticut River, Brattleboro, (Grout).

CINNA. Wood Reed Grass

C. arundinacea L. Wood Reed Grass. Moist woods; frequent in the lower altitudes.

C. latifolia (Trev.) Griseb. (C. pendula Trin.). Slender Wood Reed Grass. Moist woods, especially on mountain sides; frequent.

DACTYLIS. Orchard Grass

D. glomerata* L. Fields, in shade; common.

DANTHONIA. Wild Oat Grass

D. compressa Aust. Dry banks and woods; occasional.

D. spicata (L.) Beauv. Common Wild Oat Grass. Sterile soil; common.

DESCHAMPSIA

D. atropurpurea (Wahlenb.) Scheele. A single specimen collected on Mt. Mansfield by Joseph Torrey, probably before 1853, is in the University of Vermont herbarium. Later botanists have failed to rediscover it.

D. caespitosa (L.) Beauv. Tufted Hair Grass. Rocky banks and shores; frequent in the lower altitudes.

D. flexuosa (L.) Trin. Common Hair Grass. Dry soil, ascending to highest mountain tops; common.

DIGITARIA. (SYNTHERISMA). Finger Grass

D. humifusa* Pers. (S. Ischaemum [Schreb.] Nash). Small Crab-grass. Occasional in fields and lawns.

D. sanguinalis* (L.) Scop. Large Crab-grass. Cultivated fields and waste places; common.

ECHINOCHLOA

E. crusgalli* (L.) Beauv. Barnyard Grass. Cultivated ground and moist places; common.

ELYMUS. Wild Rye

E. australis Scribn. & Ball. Jamaica, (Dobbin); Essex Junction, (Blake); Townshend, (Wheeler).

E. canadensis L. Nodding Wild Rye. Low thickets and river banks; common. Var. *glaucifolius* (Muhl.) Gray. With type; occasional. Prefers dryer situations.

E. robustus Scribn. & J. G. Sm. Burlington, (Jones).

E. striatus Willd. Slender Wild Rye. Middlebury, (James, Brainerd); ledges of Winooski River, (Pringle); along Otter Creek, Brandon, (Dutton).

E. virginicus L. Wild Rye. Moist thickets along streams in the lower altitudes; frequent. Var. *hirsutiglumis* (Scribn.) Hitchc. (*E. hirsutiglumis* Scribn.). West Haven, (Kirk).

ERAGROSTIS

E. capillaris (L.) Nees. Hair Grass. Twin Mt., West Rutland, (Kirk).

E. hypnoides (Lam.) BSP. (*E. reptans* Nees.). Gravelly or sandy banks, in lower altitudes of western Vermont; occasional.

E. megastachya* (Koeler) Link. (*E. major* Host). Stink Grass, Snake Grass. Waste places; Burlington, Woodstock, (Jones); Pownal, Bennington, (Eggleson); Middlebury, (Brainerd); Rutland, (Kirk).

E. pectinacea (Michx.) Steud. Purple Eragrostis. Dry sandy soil; frequent in the lower Connecticut Valley; Townshend, (Wheeler); Essex Junction, (Blake); Stowe, (Mrs. Carrie Straw).

E. pilosa (L.) Beauv. (*E. Purshii* Schrad.). Sandy soil along railroads; frequent.

FESTUCA. Fescue Grass

F. elatior* L. Taller or Meadow Fescue. Fields; common.

F. nutans Spreng. Rocky woods in the low altitudes of western Vermont; frequent.

F. octoflora Walt. Slender Fescue. Burlington, (C. H. Knowlton).

F. ovina L. Sheep's Fescue. Frequently introduced, especially in lawns. Var. *brevifolia* (R. Br.) Hack. (*F. brachyphylla* Schultz). Cliffs of Smugglers' Notch; rare. (Grout & Eggleson). Var. *capillata** (Lam.) Hack. (*F. capillata* Lam.). Introduced; occasional.

F. rubra L. Rocky shores and islands of Lake Champlain; occasional; swamp, Stratton Mountain, (Jones). Var. *subvillosa* Mert. & Koch. In lawn, South Burlington, (Jones).

GLYCERIA. (PANICULARIA). Manna Grass

G. acutiflora Torr. Border of pond, Rutland, (Kirk).

G. borealis (Nash) Batchelder. Wet places and shallow water; common.

G. canadensis (Michx.) Trin. Rattlesnake Grass. Wet places; common.

G. grandis Wats. Reed Meadow Grass. Wet soil; common.

G. nervata (Willd.) Trin. Fowl Meadow Grass. Wet meadows; common.

G. pallida (Torr.) Trin. Pale Manna Grass. Shallow water or wet soil; occasional.

G. pallida (Torr.) Trin., var. **Fernaldii** Hitchc. Townshend, (Wheeler).

G. septentrionalis Hitchc. Floating Manna Grass. Hartland, (Ruggles).

G. Torreyana (Spreng.) Hitchc. (*G. elongata* Trin.). Wet woods, especially in the mountains; frequent.

HIEROCHLOE. (SAVASTANA). Holy Grass

H. alpina (Sw.) R. & S. Summit of Mt. Mansfield, (Tuckerman and Macrae).

H. odorata (L.) Wahlenb. (*H. borealis* R. & S.). Vanilla or Seneca Grass. Moist meadows; occasional.

HOLCUS. (NOTHOHOLCUS)

H. lanatus* L. Velvet Grass. Fields; Charlotte, (Pringle and Horsford); Peacham, (Blanchard); Windham, (W. H. Blanchard).

HORDEUM. Barley

H. aegiceras* Nees. Egyptian Barley. Willoughby Lake, (Jones); railroad yard, Burlington, (Jones, Mrs. N. F. Flynn).

H. jubatum L. Squirrel-tail Grass. Along railroads and in waste places. Strafford, (Collins); East Wallingford, (Kent); Rutland, (Kirk); Burlington, (Jones); Brandon, (Dutton).

HYSTRIX. Bottle-brush Grass

H. patula Moench. (*Asperella* *Hystrix* Humb.; *H. Hystrix* [L.] Millsp.). Rocky woods; frequent.

LEERSIA. (HOMALOCENCHRUS). Cut Grass

L. oryzoides (L.) Sw. Rice Cut Grass. Wet places in the lower altitudes; common.

L. virginica Willd. Cut Grass, Scratch Grass. Wet woods of the lower altitudes; frequent.

LEPTOLOMA

L. cognatum (Schultes) Chase. Fall Witch Grass. Townshend, (Wheeler); Hartland, (Underwood).

LOLIUM. Darnel

L. perenne* L. Rye-grass, Common Darnel. By roadsides and in meadows; occasional.

L. temulentum* L. Bearded Darnel. Burlington, (Jones); Essex, (Willd.).

MELICA. Melic Grass

M. striata (Michx.) Hitchc. (*Avena striata* Michx.). Purple Oat. Rocky woods; occasional.

MILIUM. Millet Grass

M. effusum L. Cool moist woods; frequent in the mountains.

MOLINIA. (AIRA)

M. caerulea* (L.) Moench. Spreading to woods from cemetery, Rutland, (Kirk.).

MUHLENBERGIA. Drop-seed Grass

M. foliosa (R. & S.) Trin. (*M. mexicana* [L.] Trin.). Swampy ground. Willoughby Mt., (Faxon); Townshend, (Wheeler); Sudbury (F. W. Hubby); North Pownal, (W. H. Blanchard); Essex Junction, (Blake). Rhod. 15:160.

M. foliosa (R. & S.) Trin., subsp. **ambigua** (Torr.) Scribn. Lake Champlain, (Faxon).

M. mexicana (L.) Trin. Knot-root Grass. Dry ground and waste places; common.

M. racemosa (Michx.) BSP. (*M. glomerata* Trin.). Wet rocks and marshy places; frequent and variable.

M. Schreberi J. F. Gmel. (*M. diffusa* Schreb.). Drop-seed, Nimble Will. Shaded places in the lower altitudes; occasional.

M. sobolifera (Muhl.) Trin. "Rocky shady hills," (Oakes); Twin Mt., West Rutland, (Kirk.).

M. sobolifera (Muhl.) Trin., var. **setigera** Hitchc. West Haven, (Kirk.).

M. sylvatica Torr. (*M. umbrosa* Scribn.). Moist banks; occasional.

M. tenuiflora (Willd.) BSP. (*M. Willdenowii* Trin.). Rocky woods; occasional.

ORYZOPSIS. Mountain Rice

O. asperifolia Michx. Woods; common.

O. pungens (Torr.) Hitchc. (*O. canadensis* Torr.). Dry sandy soil in the lower altitudes; occasional.

O. racemosa (Sm.) Ricker. (*O. melanocarpa* Muhl.). Rocky woods; frequent.

PANICUM. Panic Grass

P. agrostoides Spreng. Hartland, (Ruggles); Newfane, (Grout).

P. barbulatum Michx. (*P. dichotomum* L.). Colchester, (Jones).

P. boreale Nash. Woods and fields; frequent on east side of the state; occasional elsewhere.

P. capillare L. Old-witch Grass, Tumble-weed. Fields; common.

P. clandestinum L. Moist thickets in the lower altitudes; frequent.

P. columbianum Scribn. Dry sandy soil; frequent about Burlington.

P. depauperatum Muhl. Dry woods and fields in the lower altitudes; occasional.

P. dichotomum L. Woods in the lower altitudes; occasional.

P. huachueae Ashe. (*P. unciphyllum* of recent Am. auth., not Trin.). Open ground in the lower altitudes; frequent.

P. huachueae Ashe, var. *silvicola* Hitchc. & Chase. Woods in the lower altitudes; occasional.

P. implicatum Scribn. Wet meadows; frequent in Champlain Valley.

P. latifolium L. (*P. macrocarpon* Le Conte). Woodlands in the lower altitudes; common.

P. Lindheimeri Nash. Willoughby. (E. & C. E. Faxon).

P. linearifolium Scribn. Dry woods and fields in the lower altitudes; common.

P. miliaceum* L. European Millet. Burlington, (Brainerd); Rutland, (Kirk); Townshend, (Wheeler).

P. philadelphicum Bernh. (*P. minus* Nash). Lake Memphramagog, (Tuckerman).

P. scarioioides Ashe. Sandy or gravelly soil; Hartland, (Ruggles).

P. Scribnerianum Nash. (*P. scoparium* Wats. & Coult.). Brattleboro, (Grout); Westminster, (Robinson).

P. sphaerocarpon Ell. Along railroad, Putney, (W. H. Blanchard).

P. subvillosum Ashe. (*P. meridionale* Ashe). Dry woods and sandy ground; Burlington, (Jones); Rutland, (Eggleston).

P. tennesseense Ashe. Moist ground in the Champlain Valley; frequent. Hartland, (Ruggles).

P. tsugetorum Nash. Moist ground; rare. Burlington, (Jones, Mrs. N. F. Flynn); Salisbury, (Brainerd); Hartland, (Ruggles).

P. virgatum L. Switch Grass, Tall Panic Grass. Brattleboro, (M. A. Howe); Ferrisburg, (Kirk); Hartland, (Ruggles).

P. Wernerii Scribn. Dry woods and fields; Burlington and Colchester, (Jones).

P. xanthophysum Gray. Dry sandy soil; frequent in the lower altitudes.

PASPALUM

P. Muhlenbergii Nash. Sandy fields; Bellows Falls, (Carey); Hartland, (Ruggles); Vernon, (Grout); Townshend, (Wheeler).

PHALARIS. Canary Grass

P. arundinacea L. Reed Canary-grass. Wet soil; frequent. Var. *pieta** L. Ribbon Grass. A frequent garden escape.

P. canariensis* L. Canary-grass. Waste places; occasional.

PHLEUM

P. pratense* L. Timothy, Herd's Grass. Fields; common.

PHRAGMITES. Reed Grass

P. communis Trin. (P. Phragmites [L.] Karst). Wild Broom Corn. Swampy margins of ponds and lakes; occasional.

POA. Meadow Grass. Spear Grass

P. alsodes Gray. Moist woods; common.

P. annua* L. Low Spear Grass. Waysides and fields; common.

P. compressa* L. Canada Blue Grass, Wire Grass. Dry fields and woods; common.

P. debilis Torr. Dry rocky woods in western Vermont; frequent.

P. laxa Haenke. Summit of Mt. Mansfield, (Robbins).

P. nemoralis L. Rocky woods and cliffs; occasional; very variable.

P. pratensis L. Kentucky Blue-grass, June Grass. Pastures and fields; common.

P. triloba Gilib. (P. serotina Ehrh.). False Red Top, Fowl Meadow Grass. Wet soil; common.

SETARIA. (CHAETOCHELOA). Bristly Foxtail Grass

S. glauca* (L.) Beauv. Foxtail, Pigeon Grass. Fields; common.

S. italicica (L.) Beauv., var. **germanica*** (Mill) Richter. Italian or German Millet, Hungarian Grass. Occasionally adventive but not persistent.

S. verticillata* (L.) Beauv. Rough Foxtail Grass. Old garden, Burlington, (Jones).

S. viridis* (L.) Beauv. Green Foxtail, Bottle Grass. Fields and waste places; common.

SORGHASTRUM. (ANDROPOGON. CHRYSOPOGON)

S. nutans (L.) Nash. Indian Grass, Wood Grass. Dry sandy soil in the lower altitudes; occasional.

SPARTINA. Cord or Marsh Grass

S. Michauxiana Hitchc. (S. cynosuroides Willd. in part). Slough Grass, Tall Marsh Grass. Bellows Falls, (Carey). Shores of Lake Champlain and tributaries; frequent.

SPHENOPHOLIS

S. nitida (Spreng.) Scribn. (Eatonia Dudleyi Vasey). Colchester, (Torrey).

S. pallens (Spreng.) Scribn. (Eatonia pennsylvanica Gray). Moist rocky woods and marshes; frequent.

SPOROBOLUS. Drop-seed. Rush Grass

S. asper (Michx.) Kunth. Thompson's Point, Charlotte, (Pringle).

S. neglectus Nash. Dry sandy soil in the lower altitudes; occasional.

S. uniflorus (Muhl.) Scribn. & Merr. (S. serotinus Gray). Wet soil; Ripton, (Boyce); Bakersfield, (Pringle); Peacham, (Blanchard); frequent in elevated bogs, Windham County, (Grout).

S. vaginiflorus (Torr.) Wood. Dry soil in the lower altitudes; occasional.

TRIDENS

T. flavus (L.) Hitchc. Tall Red Top. Townshend, (Wheeler).

TRISETUM

T. melicoides (Michx.) Vasey. (*Graphephorum melicoideum* [Michx.] Beauv.). Banks of Winooski River, Colchester and Williston, (Pringle); South Burlington, (Jones).

T. spicatum (L.) Richter. (*T. subspicatum* Beauv., var. *molle* Gray). Narrow False Oat. Dry woods and ledges; occasional.

ZIZANIA. Water or Indian Rice

Z. aquatica L. Wild Rice, Water Oats. In shallow water, Burlington, (Mrs. N. F. Flynn); Lake Memphramagog, (Underwood); West Haven, (Kirk).

Z. palustris L. (*Z. aquatica* Am. auth. not L.). Wild Rice, Water Oats. Marshy borders of Lake Champlain and its tributaries; occasional.

CYPERACEAE. SEDGE FAMILY

CAREX. Sedge

C. aenea Fernald. Cliffs and sand plains; occasional in Rutland and Addison Counties.

C. aestivalis M. A. Curtis. Rocky woods; rare. South Pownal, (J. R. Churchill).

C. albicans Willd. Dry shady ledges; common in western Vermont. Lake Willoughby, (Kennedy); Townshend, (Wheeler).

C. alopecoidea Tuckerm. Wet meadows and damp woods; rare. Middlebury, (Brainerd); Burlington, (Hazen); Rutland, (Eggleson).

C. aquatilis Wahlenb. Borders of ponds and rivers; occasional.

C. aquatilis Wahlenb., var. **vireseens** Anders. Rutland, (Eggleson); Pownal, (Churchill).

C. areta Boott. (*C. canescens*, var. *polystachya* Boott). Wet woods; rare. Peacham, (Blanchard); Knight's Island, (Brainerd); Highgate Springs, (Jesup).

C. aretata Boott. Moist woodlands; common.

C. atrata L., var. **ovata** (Rudge) Boott. (*C. atratiformis* Britton). Smugglers' Notch, (Pringle, Burnham).

C. aurea Nutt. Moist meadows; common.

C. Backii Boott. (*C. durifolia* Bailey). Shaded ledges; occasional in the lower altitudes of western Vermont.

C. Bebbii Olney. (*C. tribuloides*, var. *Bebbii* Bailey). Dry low grounds; frequent.

C. Bicknellii Britton. Dry soil; rare. Leicester, (Woodward).

C. bromoides Schkuhr. Bogs and swamps; common.

C. brunneoseps Poir. (*C. canescens*, var. *alpicola* Wahlenb.). Common in the mountain woods above 1,800 feet.

C. canescens L. Ripton, (Brainerd).

C. canescens L., var. **disjuncta** Fernald. Wet places; frequent, especially in the mountains.

C. canescens L., var. **subfoliacea** Laestad. Cold bogs; rare. Mt. Mansfield, (Brainerd); Mud Pond, Wallingford, (Brainerd and Eggleston).

C. castanea Wahlenb. Low meadows; local. Pomfret, (Morgan); Barnet, (Blanchard); Middlebury, (Brainerd); Williston, (Mrs. N. F. Flynn); Rutland, (Kirk).

C. cephaloidea Dewey. Moist woods; occasional. Middlebury, (Burt); Hartford, (Bates); South Burlington, (Hazen); Essex and Rutland, (Kirk).

C. cephalophora Muhl. Dry woods and fields; frequent. Reported in Connecticut Valley north to Hartland.

C. chordorrhiza L. f. Cold bogs; rare. Bristol Pond, (Pringle); "Eastern Vermont," (Congdon); Perch Pond, Pownal, (J. R. Churchill); Colchester, (Jones, Grout).

C. communis Bailey. (C. pedicellata Britton). Dry fields; common.

C. comosa Boott. (C. Pseudo-Cyperus, var. *americana* Hochst.). Swamps; frequent.

C. conoidea Schkuhr. Moist meadows in the lower altitudes; occasional.

C. Crawfordii Fernald. (C. scoparia, var. *minor* Boott). Open sterile soil; frequent. Var. **vigens** Fernald. Middlebury, (Brainerd); Rutland, (Eggleston); St. Johnsbury and Burlington, (Hazen).

C. crinita Lam. Swales and along brooks; common.

C. crinita Lam., var. **gynandra** (Schwein.) Schwein. & Torr. (C. *gynandra* Schwein.). Wet soil, especially in the mountains; frequent.

C. crinita Lam., var. **simulans** Fernald. Mt. Mansfield, (Brainerd); Ripton, (E. F. Williams).

C. cristata Schwein. (C. *tribuloides*, var. *cristata* Bailey; C. *cristatella* Britton). Wet grounds in low places; occasional.

C. debilis Michx., var. **Rudgei** Bailey. (C. *tenuis* Rudge; C. *flexuosa* Muhl.). Frequent in moist sterile soil in the mountains. Colchester, (Hazen).

C. deflexa Hornem. Abby Pond, Ripton, (Brainerd); Groton, (Pringle); St. Johnsbury, (Eggleston and Isabel Paddock); East Wallingford, (Kent); Peacham, (Blanchard).

C. Deweyana Schwein. Dry woods; common.

C. diandra Schrank. (C. *teretiuscula* Gooden.). Bogs; occasional.

C. diandra Schrank, var. **ramosa** (Boott) Fernald. (C. *teretiuscula*, var. *ramosa* Boott; C. *prairea* Dewey). Bristol Pond, (Brainerd); Peacham, (Blanchard); Rutland, (G. H. Ross); Brandon, (Dutton).

C. digitalis Willd. Dry open woods in the lower altitudes; frequent.

C. eburnea Boott. (C. *setifolia* Britton). On dry shaded limestone; frequent.

C. exilis Dewey. Peat bogs. Bristol, (Pringle); Peacham, (Blanchard); Franklin, (Underwood).

C. festucacea Schkuhr. (C. *straminea*, var. *festucacea* Tuckerm.). Dry soil in the lower altitudes; occasional.

C. festucacea Schkuhr, var. **brevior** (Dewey) Fernald. (*C. straminea*, var. *brevoir* Dewey). Gardner's Island, Lake Champlain, (Brainerd).

C. filiformis L. (*C. lasiocarpa* Ehrh.). Peaty borders of ponds; frequent.

C. flava L. Low meadows; common.

C. flava L., var. **elatior** Schlecht. (*C. lepidocarpa* Tausch). Flat sandy borders of ponds; frequent in western Vermont.

C. flava L., var. **rectirostra** Gaudin. (*C. flava*, var. *graminis* Bailey). Margins of springs and ponds at higher altitudes than type; common.

C. foenea Willd. Dry woods of the lower altitudes; often on rocks; rare. Var. **perplexa** Bailey. Dry copses; Middlebury, (Brainerd); Fairlee, (Blanchard); Rutland, (Eggleson); St. Johnsbury, (Hazen).

C. folliculata L. Cold swamps; Burlington, (Torrey, Mrs. N. F. Flynn); Stratton and Marlboro Ponds, (Grout); Sunderland, (Eggleson); Athens, (Wheeler).

C. formosa Dewey. Moist meadows; Middlebury, (Brainerd); Shelburne, (Mrs. N. F. Flynn).

C. glaucodea Tuckerm. Middletown Springs, (Carpenter).

C. Goodenowii J. Gay. (*C. rigida*, var. *Goodenowii* Bailey). Wet meadows, Peacham, (Blanchard).

C. gracillima Schwein. Low meadows; common.

C. granularis Muhl. Moist meadows of the lower altitudes; common.

C. granularis Muhl., var. **Haleana** (Olney) Porter. (*C. Shriveri* Britton). Burlington, (Hazen).

C. Grayii Carey. (*C. Asa-Grayi* Bailey). Swales, along rivers and lakes of the Champlain Valley; rare.

C. grisea Wahlenb. Along brooks in thickets in the lower altitudes; occasional.

C. Hitchcockiana Dewey. Rich woods; occasional in western Vermont. Pomfret, (A. R. Morse).

C. Houghtonii Torr. Dry sandy banks; Norwich, (E. A. Edmunds); Rutland, (Eggleson); Burlington, (Mrs. N. F. Flynn).

C. hystericina Muhl. Wet meadows; common. Var. **Cooleyi** Dewey. Wetter places than type; occasional.

C. intumescens Rudge. Wet woods and swamps; common.

C. intumescens Rudge, var. **Fernaldii** Bailey. Similar situations as the type; occasional.

C. lanuginosa Michx. (*C. filiformis* L., var. *latifolia* Boeckl.). Swales and low meadows of the lower altitudes; frequent.

C. laxiculmis Schwein, var. **copulata** (Bailey) Fernald. Moist copses in the lower altitudes; occasional.

C. laxiflora Lam. Rich woods and meadows; occasional.

C. laxiflora Lam., var. **blanda** (Dewey) Boott. (*C. blanda* Dewey). Moist meadows; frequent.

C. laxiflora Lam., var. **gracillima** Boott. West Haven, (Kirk and Ross); Middlebury, (Brainerd).

C. laxiflora Lam., var. **latifolia** Boott. (*C. albursina* Sheldon). Moist rich woods; frequent.

C. laxiflora Lam., var. **patulifolia** (Dewey) Carey. (*C. anceps* Muhl.). Rich woods; frequent.

C. laxiflora Lam., var. **varians** Bailey. Copses and meadows; common.

C. lenticularis Michx. Sandy borders of ponds and lakes; rare.

C. leptalea Wahl. Wet woods and bogs; frequent.

C. leptonervia Fernald. (*C. laxiflora* Lam., var. *leptonervia* Fernald). Rhod. 16: 213. New Haven and Middlebury, (Brainerd); Mt. Mansfield, (Churchill); Mt. Willoughby, (E. S. Hoar); Townshend, (Wheeler).

C. limosa L. Bogs; occasional.

C. livida (Wahlenb.) Willd. Bogs north of Bristol Pond, (Pringle).

C. longirostris Torr. (*C. Sprengelii* Dewey). Shady ledges and banks of the lower altitudes; frequent.

C. lupuliformis Sartwell. (*C. lupulina* Muhl., var. *polystachya* Schwein. & Torr.). Marshes along Lake Champlain; frequent. Hartland, (Kirk).

C. lupulina Muhl. Swamps and ditches of the lower altitudes; common.

C. lupulina Muhl., var. **pedunculata** Dewey. North Hero, (Brainerd); Newfane, (Grout); Middletown Springs, (Carpenter); Burlington, (Hazen).

C. lurida Wahlenb. Wet meadows; common.

C. lurida Wahlenb., var. **gracilis** (Boott) Bailey. (*C. Baileyi* Britt.). Bogs in the mountains; frequent.

C. Michauxiana Boeckl. (*C. abacta* Bailey). Bogs and lake borders at high altitudes; Sterling Pond, (Pringle); frequent in the elevated bogs of Windham County, (Grout); Fifield Pond, Wallingford, (Eggleson); also at Lake of the Clouds, Mt. Mansfield, from seed sown there by Mr. Pringle.

C. mirabilis Dewey. (*C. normalis* Mackenzie). Moist shaded places; occasional. Var. **perlonga** Fernald. Little Notch, Bristol, (Brainerd).

C. Muhlenbergii Schkuhr. Dry sand, near Fort Ethan Allen, (Hazen). Var. **enervis** Boott. Townshend, (Wheeler).

C. novae-angliae Schwein. Shady knolls; frequent in the mountains.

C. Oederi Retz., var. **pumila** (Cosson & Germain) Fernald. (*C. flava* L., var. *viridula* Bailey). Shores of lakes and rivers. Lake Fairlee, (Blanchard); Pomfret, (Morgan); White River, (Flint); Shelburne, (F. A. Ross); Willoughby, (Kennedy).

C. oligocarpa Schkuhr. Dry copses; Middlebury, (Brainerd); North Hero, (Cushman).

C. oligosperma Michx. Bogs; Peacham, (Blanchard); Stratton, (Grout); Sunderland, (Eggleson); Colchester, (Blake).

C. pallescens L. Low meadows; common.

C. pauciflora Lightf. Sphagnum bogs; rare.

C. paupercula Michx., var. **irrigua** (Wahlenb.) Fernald. (*C. magellanica* Gray's Manual, ed. 6, not Lam.). Cold bogs; occasional.

C. paupercula Michx., var. **pallens** Fernald. Cold bogs; rare.

C. pedunculata Muhl. Dry woods of the lower altitudes; frequent.

C. pennsylvanica Lam. Shady hillsides of the lower altitudes; common.

C. pennsylvanica Lam., var. **lueorum** (Willd.) Fernald. Damper places than type and less common. Middlebury and Burlington, (Brainerd); Pownal, (Churchill); Fair Haven, (Egglesston); Rutland, (Kirk).

C. plantaginea Lam. Rich woods; frequent.

C. platyphylla Carey. Shady banks; common.

C. polygama Schkuhr. (*C. fusca* All.; *C. Buxbaumii* Wahl.). Bogs; Burlington, (Torrey); Fairlee, (Jesup); Mendon, (Egglesston).

C. prasina Wahlenb. Springy bogs in woods of the lower altitudes; occasional.

C. Pseudo-Cyperus L. Swamps; Knight's Island, (Brainerd); Barnet, (Blanchard); Fair Haven, (Kirk); Shelburne, (Blake).

C. pubescens Muhl. (*C. hirtifolia* Mackenzie). Damp thickets of the lower altitudes; occasional.

C. retrorsa Schwein. Swamps; common.

C. retrorsa Schwein., var. **Hartii** (Dewey) Gray. Marshes; occasional.

C. rigida Good., var. **Bigelowii** (Torr.) Tuckerm. (*C. concolor* R. Br.). Alpine summits of Green Mountains.

C. riparia W. Curtis. Swales; occasional.

C. rosea Schkuhr. Rich dry woods; common.

C. rosea Schkuhr, var. **minor** Boott. Willoughby Lake, (William Boott); North Hero, (Cushman).

C. rosea Schkuhr, var. **radiata** Dewey. Shady knolls; frequent.

C. rostrata Stokes. (*C. utriculata* Boott, var. *minor* Boott). Marshes; occasional.

C. rostrata Stokes, var. **utriculata** (Boott) Bailey. (*C. utriculata* Boott). Marshes; frequent.

C. seabratia Schwein. Springy bogs in woods; frequent.

C. Schweinitzii Dewey. Swamps; local. Pownal, (Dewey); Salisbury, (Brainerd); Manchester, (Mary A. Day); North Dorset, (Mrs. N. F. Flynn).

C. scirpoidea Michx. Alpine cliffs, Willoughby Lake, Smugglers' Notch; also Mt. Equinox, Manchester, (Mary A. Day); Mt. Horrid, Rochester, (Dutton).

C. scirpoidea Schkuhr. (*C. interior* Bailey). Boggy meadows: common.

C. scoparia Schkuhr. Moist meadows; common. Var. **condensa** Fernald. Similar situations as the type; frequent. Var. **moniliformis** Tuckerm. Burlington, (Hazen); Dame Island, (Brainerd).

C. setacea Dewey. Sudbury, (Brainerd).

C. setacea Dewey, var. **ambigua** (Barrat) Fernald. (C. xanthocarpa Bicknell; C. annectens Bicknell). Moist meadows; common in Addison County, (Brainerd); Rutland, (Kirk).

C. siecata Dewey. Sandy shore of Lake Champlain north of Lake View Cemetery, Burlington.

C. sparganioides Muhl. Rich moist woods; occasional.

C. stellulata Good. (C. sterilis Am. auth. not Willd.; C. Leersii Willd.). Wet meadows and pastures, especially in the mountains.

C. stellulata Good., var. **angustata** Carey. (C. sterilis, var. *angustata* Bailey). Mostly in shade at high altitudes.

C. stellulata Good., var. **cephalantha** (Bailey) Fernald. (C. Leersii Willd.). Bogs; Fort Ethan Allen pond and Brandon, (Kirk).

C. stellulata Good., var. **excelsior** (Bailey) Fernald. Wet margins of ponds and brooks; occasional.

C. stipata Muhl. Swales; common.

C. straminea Willd. Dryish copses and fields; common.

C. straminea Willd., var. **echinodes** Fernald. Dame Island, North Hero and Burlington, (Brainerd).

C. stricta Lam. Swales and marshes; common.

C. stricta Lam., var. **angustata** (Boott) Bailey. Swales; Manchester, (Mary A. Day).

C. stricta Lam., var. **curtissima** Peck. Essex Junction, (Brainerd); Fair Haven, (Kirk).

C. stricta Lam., var. **decora** Bailey. (C. Haydeni Dewey). Barnet, (Blanchard); East Wallingford, (Kent); Rutland, (Kirk).

C. tenella Schkuhr. (C. disperma Dewey). Cold swamps; frequent.

C. tenuiflora Wahlenb. Quaking bog, Bristol Pond, (Pringle); Cedar swamp, Fair Haven, (Oakes, Eggleston); Salem and Burlington, (Robbins); Peacham, (Blanchard); West Derby, (Underwood).

C. tineta Fernald. (C. mirabilis Dewey, var. *tincta* Fernald). Rhod. 15: 186. St. Johnsbury, (Hazen); Hartland, (Ruggles).

C. torta Boott. Along mountain streams; frequent.

C. tribuloides Wahlenb. Open swales; frequent. Var. **turbata** Bailey. Burlington, (Hazen).

C. tribuloides Wahlenb., var. **reducta** Bailey. (C. projecta Mackenzie). Moist mountain woods; occasional.

C. triceps Michx., var. **hirsuta** (Willd.) Bailey. (C. complanata Torr.). Moist fields of western Vermont; occasional. Winhall, (Carpenter and Wheeler).

C. trichocarpa Muhl. Marshes; Pownal Center, (Carpenter); West Haven, (Kirk and Ross).

C. trisperma Dewey. Cold bogs in shade; frequent.

C. Tuckermani Dewey. Swales and marshes; frequent.

C. typhinoides Schwein. (C. *typhina* Michx.). Low borders of streams and lake margins in western Vermont; occasional.

C. umbellata Schkuhr. Rocky hills and dry knolls of the lower altitudes; frequent.

C. umbellata Schkuhr, var. **brevirostris** Boott. (*C. abdita* Bicknell).
Snake Mt., (Brainerd).

C. vaginata Tausch. (*C. saltuensis* Bailey). Deep swamps; Sutton, (Pringle).

C. varia Muhl. Dry woods; Weeping Rocks, Pownal, (Eggleson and Andrews); Colchester, (Brainerd); Burlington, (Pringle); North Pownal, (Eggleson); Hartland, (Ruggles).

C. vesicaria L. Swales; occasional. Var. **distenta** Fries. Knight's Island, (Brainerd). Var. **jejuna** Fernald. Swales; occasional. Var. **monile** (Tuckerm.) Fernald. (*C. monile* Tuckerm.). Swales; common.

C. virescens Muhl. (*C. virescens* Muhl., var. *costata* Dewey). Moist coves; Middlebury, (Brainerd); Rutland, (Kirk).

C. virescens Muhl., var. **Swanii** Fernald. (*C. virescens* Gray's Man. ed. 6, not Muhl.; *C. Swanii* [Fernald] Mackenzie). Moist pastures; common.

C. vulpinoidea Michx. Moist pastures; common.

C. arctata x **castanea** Bailey. One plant, Middlebury, (Brainerd).

C. lurida x **lupulina** Bailey. North Hero, (Morong).

C. stricta x **torta** Fernald. Mt. Mansfield, (Kennedy).

CLADIUM. (MARISCUS). Twig Rush

C. mariscoides (Muhl.) Torr. Low borders of ponds; occasional.

CYPERUS. Galingale

C. aristatus Rottb. (*C. inflexus* Muhl.) Wet sandy soil of the lower altitudes; frequent.

C. dentatus Torr. Sandy shores of ponds in the lower altitudes; occasional.

C. diandrus Torr. Low ground; occasional.

C. esculentus L. Alluvial soil of the lower altitudes; occasional.

C. filiculmis Vahl., var. **macilentus** Fernald. Dry sands of the lower altitudes; common.

C. Houghtonii Torr. Shifting sand; Fairlee Lake, (Jesup); Colchester, (Mrs. N. F. Flynn); Castleton, (Brainerd); Essex Junction, (Blake).

C. rivularis Kunth. (*C. diandrus* Torr., var. *castaneus* Torr.). Wet soil of the lower altitudes; common.

C. strigosus L. Moist soil of the lower altitudes; frequent. Forma **capitatus** (Boeckl.) Blake. Rhod. 15: 200. Cobble Hill, Milton, and Swanton, (Blake).

C. strigosus L., var. **compositus** Britton. Essex Junction, Burlington, and Swanton, (Blake).

DULICHIUM

D. arundinaceum (L.) Britton. (*D. spathaceum* Pers.). Borders of ponds; common.

ELEOCHARIS. Spike-rush

E. acicularis (L.) R. & S. Pools and shores below high water mark; common.

E. diandra C. Wright. Wet sands of Connecticut River, Westminster, (Brainerd); Burlington, (Mrs. N. F. Flynn).

E. intermedia (Muhl.) Schultes. In mire or wet sands; occasional.

E. obtusa (Willd.) Schultes. Muddy places; common.

E. olivacea Torr. Soft mire; Bristol Pond, (Pringle); Abby Pond, Ripton, and Lake Dunmore, (Brainerd); Kenney Pond, Newfane, (Grout).

E. ovata (Roth.) R. & S. In soft black mire, inlet of Abby Pond, Ripton, and Lake Dunmore, (Brainerd); Spectacle Pond, Wallingford, (Eggleson).

E. palustris (L.) R. & S. Low borders of ponds in the lower altitudes; occasional. Var. **calva** (Torr.) Gray. Stony clay shores of Lake Champlain; occasional. Var. **glaucescens** (Willd.) Gray. Moist grassy places; common. Var. **major** Sonder. (var. *vigens* Bailey). Rhod. 11: 39. Low sandy shores of Lake Champlain; frequent.

E. tenuis (Willd.) Schultes. Wet meadows and lake borders; common.

ERIOPHORUM. Cotton-grass

E. callitrix Cham. (E. *vaginatum* Am. auth., not L.). Peat bogs; occasional.

E. gracile Roth. Bogs; Middlebury, Ripton, (Brainerd); Ryegate, (Blanchard); Willoughby Lake, (A. W. Cheever).

E. tenellum Nutt. (E. *gracile*, var. *paucinervium* Engelm.). Bogs; occasional.

E. virginicum L. Peat bogs; frequent.

E. viridi-carinatum (Engelm.) Fernald. (E. *polystachion* of most Am. auth.). Springy places and bogs; common.

FIMBRISTYLIS

F. autumnalis (L.) R. & S. Lily Pond, Vernon, (Grout).

RYNCHOSPORA. Beak-rush

R. alba (L.) Vahl. Bogs; frequent.

R. capillacea Torr. Willoughby Mountain, (Jesup); Hartford, (Morgan).

R. fusca (L.) Ait. f. Low grounds; Thetford Center, (Blanchard); Wells River, (Horsford).

R. glomerata (L.) Vahl. Moist soil of the lower altitudes; occasional.

SCIRPUS. Bulrush. Club Rush

S. americanus Pers. (S. *pungens* Vahl.). Chair-maker's Rush. Sandy borders of lakes and rivers in the lower altitudes; frequent.

S. atrocinetus Fernald. Wet meadows; common, especially in the mountains. Var. **brachypodus** Fernald. Bogs, generally at high altitudes; occasional.

S. atrovirens Muhl. Wet meadows. The typical form is rare. Var. **pyrrocephalus** Fernald. Hartland, (Dutton); Essex Junction, Burlington, St. Albans, Swanton, (Blake).

S. caespitosus L. Moist rocks of alpine summits; local. Mt. Equinox, Sandgate, (Burnham and Dobbin).

S. cyperinus (L.) Kunth. Wool Grass. Wet meadows; Middlebury, (Brainerd); Rutland, (Kirk). Var. **Andrewsii** Fernald. Middlebury, (Brainerd); Wallingford, (Eggleson).

S. cyperinus (L.) Kunth. var. **pelius** Fernald. Wet places; common. Var. **condensatus** Fernald. Middlebury and Ripton, (Brainerd); Williston, (Blake).

S. debilis Pursh. Wet soil; Norwich, (Jesup); Westminster, (Brainerd).

S. fluviatilis (Torr.) Gray. River Bulrush. Marshy borders of bays and tributaries of Lake Champlain; frequent.

S. georgianus Harper. Wet places; common.

S. heterochaetus Chase. Sheltered shores of northern Lake Champlain; occasional.

S. hudsonianus (Michx.) Fernald. (*Eriophorum alpinum* L.). Cold bogs, especially in the mountains; common.

S. lineatus Michx. Moist clay soil; Middlebury, (Brainerd); Bristol, (Dike); Ferrisburg, (Blake).

S. occidentalis (Wats.) Chase. Sandy shores of Lake Champlain; frequent. Previously confused with *S. validus* Vahl.

S. pauciflorus Lightf. (*Eleocharis pauciflora* Link). Wet soil; Lyndon, (Congdon); Willoughby Mountain, (Tuckerman).

S. Peckii Britton. Moist meadows and bogs in the mountains; occasional. Colchester, (Mrs. N. F. Flynn).

S. pedicellatus Fernald. Swales in the lower altitudes; common. Var. **pullus** Fernald. Swales and boggy margins of ponds; occasional.

S. planifolius Muhl. Mount Philo, Charlotte, (Pringle); North Pownal, (Mrs. N. F. Flynn).

S. rubrotinctus Fernald. Wet meadows; common, especially in the mountains. Var. **confertus** Fernald. Goshen, (Dutton); Stratton, (Wheeler).

S. Smithii Gray. Keeler's Bay, Ferrisburg, (E. Faxon); mouth of Winooski River, (Grout and Tracy). Var. **setosus** Fernald. In muck, Brandon, (Kirk and Dutton).

S. subterminalis Torr. Grout Pond, Stratton, (Grout); Lake Dunmore, (Brainerd).

S. sylvaticus L. Townshend, (Wheeler).

S. Torreyi Olney. Muddy shores, Fort Cassin, Ferrisburg, (Brainerd); Swanton, (Blewitt); Barnet, (Blanchard); ponds of Windham County, (Grout); Burlington, (Blake).

S. validus Vahl. (*S. lacustris* mostly of Am. auth., not L.). Great Bulrush In shallow water; common.

STENOPHYLLUS

S. capillaris (L.) Britton. (*Fimbristylis capillaris* Gray). Dry sands of the lower altitudes; rare.

ARACEAE. ARUM FAMILY

ACORUS. Sweet Flag, Calamus

A. Calamus L. Marshes of the lower altitudes; common.

ARISAEMA. Indian Turnip

A. Dracontium (L.) Schott. Green Dragon. Low grounds; "Shoreham," (Robbins); Weybridge, (Brainerd); Rutland, (Kirk); West Haven, (Mrs. M. C. Munson).

A. triphyllum (L.) Schott. Indian Turnip, Jack-in-the-pulpit. Rich woods; common.

CALLA. Water Arum

C. palustris L. Wild Calla. Cold bogs and marshes; frequent.

PELTANDRA. Arrow Arum

P. virginica (L.) Kunth. (*P. undulata* Raf.). Shallow water; Colchester Pond, (Robbins); Middlebury, (Brainerd); Bristol Pond, (Pringle); Lake Bomoseen marshes, (Eggleston); West Haven, (Kirk).

SYMPLOCARPUS. (SPATHYEMA). Skunk Cabbage

S. foetidus (L.) Nutt. Wet places; occasional. Common around Burlington. Stratton, (W. H. Blanchard).

LEMNACEAE. DUCKWEED FAMILY

LEMNA. Duckweed

L. minor L. Lesser Duckweed. Still water; occasional.

L. trisulea L. Duck's-meat. Still water; frequent in marshes bordering Lake Champlain.

SPIRODELA

S. polystachya (L.) Schleid. Greater Duckweed. Stagnant pools; common.

ERIOCAULACEAE. PIPEWORT FAMILY

ERIOCAULON. Pipewort

E. septangulare Withering. (*E. articulatum* [Huds.] Morong in part). Rhod. 11: 40. Borders of ponds and lakes; frequent.

XYRIDACEAE. YELLOW-EYED GRASS FAMILY

XYRIS. Yellow-eyed Grass

X. caroliniana Walt. Wet borders of ponds; "Brattleboro," (Frost); Newfane, (Grout); Lily Pond, Athens and Jamaica, (Wheeler).

X. montana Ries. Cold Pond, Jamaica, (Dobbin and Wheeler).

COMMELINACEAE. SPIDERWORT FAMILY

COMMELINA. Day-flower

C. communis L. Occasional as a garden escape.

TRADESCANTIA. Spiderwort

T. pilosa Lehm. Hartland, (Underwood).

PONTEDERIACEAE. PICKEREL-WEED FAMILY

HETERANTHERA. Mud Plantain

H. dubia (Jacq.) MacM. (*H. graminea* Vahl). Water Star Grass. Ponds and streams of the Champlain Valley; frequent.

PONTEDERIA. Pickerel-weed

P. cordata L. Borders of ponds and slow streams in the lower altitudes; frequent.

JUNCACEAE. RUSH FAMILY

JUNCUS. Rush. Bog Rush

J. acuminatus Michx. Sharp-fruited Rush. Wet meadows; Essex, (Jones).*J. alpinus* Vill. Willoughby Lake, (Eggleston).*J. alpinus* Vill., var. *fuscescens* Fernald. Knight's Island, (Brainerd).*J. alpinus* Vill., var. *insignis* Fries. Wet gravelly shores of Lake Champlain; Knight's Island and Shelburne, (Pringle); Burlington, (Mrs. N. F. Flynn).*J. articulatus* L. Jointed Rush. Wet grounds; occasional.*J. articulatus* L., var. *obtusatus* Engelm. Manchester, (Mary A. Day).*J. brachycephalus* (Engelm.) Buchenau. (*J. canadensis* J. Gay, var. *brachycephalus* Engelm.). Moist sandy soil; occasional.*J. brevicaudatus* (Engelm.) Fernald. (*J. canadensis* J. Gay, var. *brevicaudatus* Engelm.). Common, especially in the mountains.*J. bufonius* L. Toad Rush. Low ground; common.*J. bufonius* L., var. *congestus* Wahlb. Burlington, (Mrs. N. F. Flynn).*J. canadensis* J. Gay. Borders of ponds in the lower altitudes; frequent.*J. Dudleyi* Wiegand. Damp soil; frequent.*J. effusus* L., var. *Pylaei* (Laharpe) Fernald & Wiegand. Rhod. 12: 92. Bog Rush. Marshy ground; common.*J. effusus* L., var. *solutus* Fernald & Wiegand. Rhod. 12: 90. Essex, Burlington, and Underhill, (Blake).*J. filiformis* L. Sandy shores of northern Lake Champlain and on mountain summits; occasional.*J. Gerardi* Loisel. Black Grass. Marshy meadow near railroad station, New Haven, (Brainerd). Perhaps introduced with salt hay used in packing.*J. Greenii* Oakes & Tuckerm. Newfane, (M. A. Howe).

J. marginatus Rostk. Newfane, (M. A. Howe); Putney, (W. H. Blanchard); Rutland, (Eggleson and Kirk); Townshend, (Wheeler).

J. nodosus L. Knotted Rush. Wet meadows; common.

J. pelocarpus Mey. Shores of ponds in the lower altitudes; occasional.

J. secundus Beauv. Twin Mt., West Rutland, (Eggleson).

J. tenuis Willd. Slender Rush, Yard Rush. Wet ground; common.

J. tenuis Willd., var. **Williamsii** Fernald. Sandy soil; Rutland, (Eggleson); Willoughby Lake, (Kennedy); Brandon, (Dutton).

J. Torreyi Coville. Along railroad track, Rutland, (Kirk); roadside, Charlotte, (Blake).

J. trifidus L. Summit of Mt. Mansfield, (Robbins); Camel's Hump, (Tuckerman and Macrae); Mount Horrid, Rochester, (Dutton and Kirk).

LUZULA. (JUNCOIDES). Wood Rush

L. campestris (L.) DC., var. **multiflora** (Ehrh.) Celak. (*L. campestris* of Am. auth. not DC.). Dry woods and fields; frequent.

L. parviflora (Ehrh.) Desv. (*L. spadicea*, var. *melanocarpa* Mey.). Wet places at high altitudes; occasional.

L. saltuensis Fernald. (*L. vernalis* Gray's Manual, ed. 6, not DC.; *J. carolinae* [S. Wats.] Kuntze). Hairy Wood Rush. Woods and banks of the lower altitudes; frequent.

L. spicata (L.) DC. Smugglers' Notch, (Pringle); rare.

LILIACEAE. LILY FAMILY

ALLIUM. Onion

A. canadense L. Wild Garlic. Wet meadows, West Rutland, (Kirk).

A. Schoenoprasum* L. Chives. Garden escape, Willoughby Lake, (Kennedy).

A. Schoenoprasum L., var. **sibiricum** (L.) Hartm. (*A. sibiricum* L.). Moist rocky shores of the Connecticut River. Windsor, (Leland); Hartland, (Eggleson).

A. tricoccum Ait. Wild Leek. Rich woods; frequent.

ASPARAGUS. Asparagus

A. officinalis* L. A frequent escape from gardens.

CLINTONIA

C. borealis (Ait.) Raf. Yellow Clintonia. Cool moist woods; common, especially in the mountains.

CONVALLARIA. Lily of the Valley

C. majalis L. Persistent in old dooryards; thickly covers an area of about six square rods in a mucky bog at Waltham, (Ruth B. Fisher).

ERYTHRONIUM. Dog's-tooth Violet

E. americanum Ker. Yellow Adder's Tongue. Rich copses and woodlands; common.

HEMEROCALLIS. Day Lily

H. flava* L. Yellow Day Lily, Lemon Lily. A garden escape, (W. H. Blanchard).

H. fulva* L. Common Day Lily. Roadside escape from gardens; frequent.

LILIUM. Lily

L. canadense L. Wild Yellow Lily, Meadow Lily. Moist meadows of the lower altitudes; common.

L. philadelphicum L. Wood Lily, Wild Orange-red Lily. Sandy open woodlands of the lower altitudes; common.

L. tigrinum* Ker. Tiger Lily. Roadside escape from gardens.

MAIANTHEMUM. (UNIFOLIUM)

M. canadense Desf. Wild Lily of the Valley, Two-leaved Solomon's Seal. Woods; common.

MEDEOLA. Indian Cucumber-root

M. virginiana L. Rich moist woods; common.

OAKESIA. (UVULARIA)

O. sessilifolia (L.) Wats. Bellwort. Moist woodlands; common.

ORNITHOGALUM. Star of Bethlehem

O. umbellatum* L. Garden escape; Brattleboro, (W. H. Blanchard); Bradford, (Alice E. Bacon).

POLYGONATUM. Solomon's Seal

P. biflorum (Walt.) Ell. Small Solomon's Seal. Wooded hillsides; common.

P. commutatum (R. & S.) Dietr. (*P. giganteum* Dietr.). Great Solomon's Seal. Meadows and river banks; Hartford, (Ward); Manchester and Vernon, (Grout); Fairlee, (Jesup and Sargent); Powell, (Eggleston and Andrews); Stowe, (Mrs. Carrie E. Straw).

SMILACINA. (VAGNERA). False Solomon's Seal

S. racemosa (L.) Desf. False Spikenard. Moist copses; common.

S. stellata (L.) Desf. Star-flowered Solomon's Seal. Wet fields and wooded swamps; frequent.

S. trifolia (L.) Desf. Three-leaved Solomon's Seal. Cold sphagnum bogs; occasional.

SMILAX. Green-brier

S. herbacea L. Carrion-flower. River banks and moist thickets of the lower altitudes; frequent.

STREPTOPUS. Twisted-stalk

S. amplexifolius (L.) DC. Wet mountain woods; frequent.
S. roseus Michx. Cold damp woods; common.

TOFIELDIA. (TRIANTHA). False Asphodel

T. glutinosa (Michx.) Pers. Quechee Gulf, (Leland); roadside, North Bridgewater, (Kirk).

TRILLIUM. Wake-robin. Birth-root

T. cernuum L. Nodding Trillium. Moist woods of the lower altitudes; occasional.
T. erectum L. Purple Trillium. Rich woods; common.
T. grandiflorum (Michx.) Salisb. White Trillium. Rich moist woods of western Vermont; common in Champlain Valley.
T. undulatum Willd. (*T. erythrocarpum* Michx.). Painted Trillium. Cool moist woods; frequent.

UVULARIA. Bellwort

U. grandiflora Sm. Large-flowered Bellwort. Rich woods of the lower altitudes; common.
U. perfoliata L. Rich woods; West Rutland, rare: Pownal, abundant, (Eggleson).

VERATRUM. False Hellebore

V. viride Ait. American White Hellebore, Indian Poke. Wet meadows and swamps; common.

ZIGADENUS. (ANTICLEA). Death Camass

Z. chloranthus Richards. (*Z. elegans* of auth., not Pursh). Bluffs of Lake Champlain, Ferrisburg, (Brainerd).

IRIDACEAE. IRIS FAMILY

IRIS. Fleur-de-lis

I. pseudacorus* L. Yellow Iris. Garden escape. Bank of Winooski River, Essex, (F. A. Ross); Leicester, (Dutton).
I. versicolor L. Wild Iris, Blue Flag. Wet meadows; common

SISYRINCHIUM. Blue-eyed Grass

S. angustifolium Mill. Moist meadows; common.
S. atlanticum Bicknell. Stratton, above 2,000 feet, (Grout); Wardsboro, (Underwood); Hartland, (Nancy Darling).
S. mucronatum Michx. Hartland, (Underwood).

ORCHIDACEAE. ORCHIS FAMILY

APLECTRUM. Putty-root. Adam-and-Eve

A. hyemale (Muhl.) Torr. Rich woods in low altitudes of western Vermont; local, St. Johnsbury, (Inez A. Howe).

ARETHUSA

A. bulbosa L. Sphagnum bogs; occasional.

CALOPOGON. (LIMODORUM)

C. pulchellus (Sw.) R. Br. (*L. tuberosum* L.). Grass Pink. Bogs; occasional.

CALYPSO. (CYTHEREA)

C. bulbosa (L.) Oakes. (*C. borealis* Salisb.). Cold cedar swamps of northern counties; rare. Leicester, (Dutton) is most southern Vermont station.

CORALLORRHIZA. Coral Root

C. maculata Raf. (*C. multiflora* Nutt.). Large Coral Root. Dry woods; occasional.

C. odontorhiza Nutt. Coral Root, Dragon's Claw. Bellows Falls, (Carey), specimen in the herbarium of the Boston Society of Natural History; Pease Mountain, Charlotte, (Pringle); Pownal, (Eggleson); Hartland, (Underwood).

C. trifida Chatelain. (*C. innata* R. Br.; *C. Corallorrhiza* [L.] Karst.). Early Coral Root. Swamps and damp woods; frequent.

CYPRIPEDIUM. Lady's Slipper. Moccasin Flower

C. acaule Ait. (*Fissipes acaulis* [Ait.] Small). Stemless or Pink Lady's Slipper. Woods and swamps; frequent.

C. arietinum R. Br. Ram's Head Lady's Slipper. Rocky woods and swamps; local and rare.

C. hirsutum Mill. (*C. spectabile* Salisb.; *C. reginae* Walt.). Showy Lady's Slipper. Cold swamps; occasional.

C. parviflorum Salisb. Smaller Yellow Lady's Slipper. Bogs and low woods; frequent.

C. parviflorum Salisb., var. *pubescens* (Willd.) Knight. (*C. pubescens* Willd.). Large Yellow Lady's Slipper. Rich moist woods; frequent.

EPIPACTIS. (GOODYERA, PERAMNIUM). Rattlesnake Plantain

E. pubescens (Willd.) A. A. Eaton. (*G. pubescens* R. Br.). Downy Rattlesnake Plantain. Dry woods at low altitudes; occasional.

E. repens (L.) Crantz, var. *ophioides* (Fernald) Eaton. (*G. repens*, var. Fernald; *P. ophioides* [Fernald] Rydb.). Lesser Rattlesnake Plantain. Cold mossy spruce woods; frequent. Rare in swamps at low altitudes.

E. tesselata (Lodd.) A. A. Eaton. (*G. tesselata* Lodd.). Rattlesnake Plantain. Cold moist woods at high altitudes; occasional.

HABENARIA. Rein Orchis, Fringed Orchis

X H. Andrewsii White. (*H. lacera* x *psycodes*). Bogs; Pownal, (Andrews); Rutland, (Kirk); Hartland, (Nancy Darling).

H. blephariglottis (Willd.) Torr. (*Blephariglottis blephariglottis* [Willd.] Rydb.). White Fringed Orchis. North Troy, (Carey); specimen in the herbarium of the Boston Society of Natural History; Smugglers' Notch, (Eggleston); Burlington, (Torrey); Johnson, (Grout); Franklin, (Underwood); North Pownal, (Grace G. Niles).

H. bracteata (Willd.) R. Br. (*Coeloglossum bracteatum* [Willd.] Parl.). Long-bracted Orchis. Damp woods and meadows; frequent.

H. ciliaris (L.) R. Br. (*Blephariglottis ciliaris* [L.] Rydb.). Yellow Fringed Orchis. Bellows Falls, (Carey); specimen in the herbarium of the Missouri Botanical Garden; reported by A. A. Eaton.

H. clavellata (Michx.) Spreng. (*H. tridentata* Hook.; *Gymnadeniopsis clavellata* [Michx.] Rydb.). Small Wood Orchis. Bogs and wet borders of ponds; occasional.

H. dilatata (Pursh.) Gray. (*Limnorchis dilatata* [Pursh.] Rydb.). White Bog Orchis. Cold bogs; frequent at high altitudes.

H. dilatata (Pursh.) Gray, var. **media** (Rydb.) Ames. Cold bogs; rare.

H. fimbriata (Ait.) R. Br. (*Blephariglottis grandiflora* [Bigel.] Rydb.). Large Purple Fringed Orchis. Cold mountain woods and meadows; occasional.

H. flava (L.) Gray. (*H. virescens* Spreng.; *Perularia flava* [L.] Farwell). Small Pale Green Orchis. Moist soil of the lower altitudes; local.

H. Hookeri Torr. (*H. Hookeriana* Gray; *Lysias Hookeriana* [Gray] Rydb.). Dry woods; occasional.

H. hyperborea (L.) R. Br. (*Limnorchis hyperborea* [L.] Rydb.). Tall Green Orchis. Bogs and cold woods; frequent.

H. lacera (Michx.) R. Br. (*Blephariglottis lacera* [Michx.] Farwell). Ragged Fringed Orchis. Moist ground; occasional.

H. leucophaea (Nutt.) Gray. (*Blephariglottis leucophaea* [Nutt.] Farwell). Moist pasture, St. Johnsbury, (Inez A. Howe).

H. macrophylla Goldie. (*H. orbiculata* Torr. in part; *Lysias orbiculata* [Pursh] Rydb.). Dry mountain woods; occasional.

H. obtusata (Pursh.) Richards. (*Lysiella obtusata* [Pursh.] Rydb.). Cold mountain woods; occasional.

H. orbiculata (Pursh.) Torr. (*Lysias orbiculata* [Pursh.] Rydb.). Large Round-leaved Orchis. Cold rich woods; occasional.

H. psycodes (L.) Sw. (*Blephariglottis psycodes* [L.] Rydb.). Smaller Purple Fringed Orchis. Wet meadows and bogs; frequent.

LIPARIS. Twayblade

L. liliifolia (L.) Richard. Large Twayblade. Rich woods; occasional.

L. Loeselii (L.) Richard. Fen Orchis. Moist fields; frequent.

LISTERA. (OPHRYS). Twayblade

L. auriculata Wiegand. Lyndon, (Congdon).

L. convallarioides (Sw.) Torr. Cold mountain bogs and brooksides; rare.

L. cordata (L.) R. Br. Heart-leaved Twayblade. Sphagnum bogs and mossy mountain woods; frequent.

MICROSTYLLIS. (MALAXIS). Adder's Mouth

M. monophyllum (L.) Lindl. White Adder's Mouth. Swamps and mountain cliffs; rare.

M. unifolia (Michx.) BSP. (M. ophiglossoides Eaton). Green Adder's Mouth. Open woods; occasional.

ORCHIS

O. rotundifolia Banks. Cold cedar swamps of northern Vermont; rare. Monkton, Bristol, and Starksboro, (Pringle).

O. spectabilis L. (Galeorchis spectabilis [L.] Rydb.). Showy Orchis. Rich moist woods of the lower altitudes; common.

POGONIA

P. affinis Aust. (Isotria affinis [Aust.] Rydb.). Small Whorled Pogonia. Burlington, one plant, (Mrs. Holt).

P. ophioglossoides (L.) Ker. Rose Pogonia, Snake-mouth. Bogs; frequent.

P. trianthophora (Sw.) BSP. (P. pendula Lindl.; Triphora trianthophora [Sw.] Rydb.). Nodding Pogonia. Dry woodlands. Fair Haven, (Chandler); Newfane, (Howe and Grout); Westminster, Putney, (W. H. Blanchard).

P. verticillata (Willd.) Nutt. (Isotria verticillata [Willd.] Raf.). Whorled Pogonia. Colchester, (Robbins, Torrey); Pownal, (Andrews, Grace G. Niles); Burlington, (F. A. Ross).

SPIRANTHES. (IBIDIUM). Ladies' Tresses

S. cernua (L.) Richard. Nodding Ladies' Tresses. Wet soil; common. Var. *ochroleuca* (Rydb.) Ames. Hartland, (Nancy Darling).

S. gracilis (Bigel.) Beck. Slender Ladies' Tresses. Sandy woods and plains; occasional.

S. lucida (H. H. Eaton) Ames. (S. latifolia Torr.; I. plantagineum [Raf.] House). Wet gravelly shores; occasional.

S. Romanzoffiana Cham. (I. strictum [Rydb.] House.). Bogs and cold moist soil; occasional.

SALICACEAE. WILLOW FAMILY

POPULUS. Poplar. Aspen

P. alba* L. White Poplar, Silver-leaved Poplar. Frequent in cultivation and an occasional escape.

P. balsamifera L. Balsam Poplar, Tacamahac. Borders of streams and swamps; frequent.

P. candicans* Ait. Balm of Gilead. Occasional in cultivation and sometimes spontaneous.

P. deltoides Marsh. Cottonwood, Necklace Poplar. Borders of lowland streams and lakes; frequent in western Vermont and in the Connecticut Valley as far north as Brattleboro.

P. grandidentata Michx. Large-toothed Aspen. Rich woods; frequent.

P. nigra L., var. *italica** Du Roi. (*P. dilatata* Ait.). Lombardy Poplar. Frequent in cultivation and spreading from the root. Only staminate trees occur.

P. tremuloides Michx. American Aspen, Trembling Poplar, Popple. Woods; common.

SALIX. Willow. Osier

S. alba* L. White Willow. Burlington, (Blake). Var. *caerulea** (Sm.) Koch. Cultivated and sometimes spontaneous. Barre, (Eunice P. Smith). Var. *vitellina** (L.) Koch. Frequent in cultivation and as an escape by streams.

S. balsamifera Barratt. (*S. pyrifolia* Anders.). Mt. Mansfield, (Pringle); Long Pond, Westmore, (E. Faxon); Elmore Mountain, (Grout). Frequent about Willoughby Lake, (Kennedy).

S. candida Flügge. Sage Willow, Hoary Willow. Cold bogs; rare.

S. cordata Muhl. Heart-leaved Willow. Low wet soil; common.

S. discolor Muhl. Glaucous Willow, Pussy Willow. Wet soil; common. Var. *eriocephala* (Michx.) Anders. South Burlington, (Kirk and Jones, Blake). Var. *prinoides* (Pursh.) Anders. Johnson, (Grout).

S. fragilis* L. Crack Willow. Common in cultivation and frequent as an escape.

S. humilis Marsh. Prairie Willow. Sandy barrens; frequent.

S. longifolia Muhl. (*S. fluviatilis* auth., not Nutt.; *S. interior* Rowlee). Sand Bar Willow. Shores of Lake Champlain and the lower Connecticut River; rare.

S. lucida Muhl. Shining Willow. Moist banks; frequent. Var. *angustifolia* Anders. Burlington, (Blake).

S. nigra Marsh. Black Willow. Banks of streams and ponds; common. Var. *falcata* (Pursh.) Torr. With type; frequent.

S. pedicellaris Pursh. Bog Willow. Peat bog, Bristol, (Egglesston and Dike).

S. pedicellaris Pursh., var. *hypoglauca* Fernald. (*S. pedicellaris* Gray's Manual, ed. 6, in part). Rhod. 11: 161. Cold bogs; Burlington, (Robbins); Rutland, (Ross); Brandon and Leicester, (Dutton); Colchester, (Grout).

S. pellita Anders. Banks of Connecticut River, Bloomfield, (Eggles-ton).

S. petiolaris Sm. Slender Willow. Swamps and shores of Lake Champlain; occasional. Willoughby Lake, (Annie Lorenz).

S. phylicifolia L. Lake of the Clouds, Mt. Mansfield, (Pringle).

S. purpurea* L. Purple Willow. Occasional as an escape. Once cultivated for basket rods.

S. rostrata Richards. (*S. Bebbiana* Sargent). Beaked Willow. Borders of thickets; common.

S. sericea Marsh. Silky Willow. In swamps and along streams; frequent.

S. Uva-ursi Pursh. Summit of Mt. Mansfield, (Robbins).

S. discolor x humilis. Johnson, (Grout).

S. fragilis* x *alba*, var. *vitellina*.* Johnson, (Grout).

S. lueida x sericea. Rutland, (Kirk).

S. nigra x sericea. Rutland, (Kirk).

S. sericea x cordata. Johnson, (Grout).

MYRICACEAE. SWEET GALE FAMILY

MYRICA

M. asplenifolia L. (*Comptonia peregrina* [L.] Coulter). Sweet Fern. Dry sterile soil of the lower altitudes; common.

M. Gale L. Sweet Gale. Swamps and borders of ponds; frequent.

JUGLANDACEAE. WALNUT FAMILY

CARYA. (HICORIA). Hickory

C. alba (L.) K. Koch. Mockernut, White Heart Hickory. Rocky pasture, Burlington, (Burns).

C. cordiformis (Wang.) K. Koch. (*C. amara* Nutt.). Bitternut Hickory. In moist soil; frequent in the lower altitudes of western Vermont and known in Connecticut Valley as far north as Hartford.

C. glabra (Mill.) Spach. (*C. porcina* Nutt.). Pignut. West Castleton, Pownal, (Eggleson); Marsh Hill, Ferrisburg, (Brainerd).

C. ovata (Mill.) K. Koch. (*C. alba* Nutt.). Shellbark Hickory. Rich soil; frequent in the lower altitudes west of the Green Mountains; known in the Connecticut Valley as far north as Bellows Falls. Often cultivated; therefore native habitat is sometimes difficult to determine.

JUGLANS. Walnut

J. cinerea L. Butternut. Rocky hillsides; frequent.

BETULACEAE. BIRCH FAMILY

ALNUS. Alder

A. crispa (Ait.) Pursh. (*A. viridis*, Gray's Manual, ed. 6, in part, not DC.; *A. Alnobetula* Am. auth. in part, not K. Koch). Green Alder. Higher mountain tops; common.

A. crispa (Ait.) Pursh, var. *mollis* Fernald. Rhod. 15: 44. Downy Green Alder. Rocky shores of Connecticut River; occasional. Burlington Bay, (Mrs. N. F. Flynn); Jamaica, (Dobbin).

A. incana (L.) Moench. Speckled or Hoary Alder. Borders of streams; common.

A. rugosa (Du Roi) Spreng. (*A. serrulata* Willd.). Smooth Alder.
Moist soil of the lower altitudes; frequent.
A. rugosa x incana. Burlington, (Jones and Eggleston).

BETULA. Birch

B. alba L. Paper, Canoe or White Birch. Mt. Mansfield, (Blake).
B. alba L., var. **cordifolia** (Regel) Fernald. Rocky mountain slopes; occasional.
B. alba L., var. **minor** (Tuckerm.) Fernald. One tree, Fairfield Pond, (Blake).
B. alba L., var. **papyrifera** (Marsh.) Spach. (*B. papyrifera* Marsh.). Woodlands; common.
B. lenta L. Cherry, Sweet or Black Birch. Rich woodlands of the lower altitudes; frequent in western Vermont and known in the Connecticut Valley as far north as Hanover, N. H. Willoughby Lake, (Kennedy).
B. Intea Michx. f. Yellow or Gray Birch. Rich cool soils; frequent, especially on mountain sides.
B. pendula Roth. (*B. caerulea* Blanchard). White or Canoe Birch. Stratton, Windham, Worcester and Elmore, (W. H. Blanchard).
B. populifolia Marsh. White, Gray or Old Field Birch. Frequent in the Champlain Valley. Occurs in every town in Windham County, in Stratton up to 2,000 feet altitude, (W. H. Blanchard); Lempington, Essex County, (Eggleston).

CARPINUS. Hornbeam. Ironwood

C. caroliniana Walt. American Hornbeam, Blue or Water Beech.
Near streams of the lower altitudes; frequent.

CORYLUS. Hazelnut. Filbert

C. americana Walt. Hazelnut. Thickets of the lower altitudes; occasional. Known in Connecticut Valley as far north as Hartford, (Jesup).
C. rostrata Ait. Beaked Hazelnut. Dry thickets; common.

OSTRYA. Hop Hornbeam. Ironwood

O. virginiana (Mill.) K. Koch. American Hop Hornbeam, Leverwood.
Rich woods; common.

FAGACEAE. BEECH FAMILY

CASTANEA. Chestnut

C. dentata (Marsh.) Borkh. Frequent in lower Connecticut Valley and in southwestern Vermont. In Connecticut Valley not known in native habitat much north of Bellows Falls. Small groves occur at West Rutland, (Eggleston), and at Leicester, (Dutton); and a few trees at Burlington, (Jones); at Colchester, (Griffin); and at Stowe, (Mrs. Carrie E. Straw).

FAGUS. Beech

F. grandifolia Ehrh. (*F. ferruginea* Ait.). Rich uplands; common.

QUERCUS. Oak

Q. alba L. White Oak. Common west of the Green Mountains. In the Connecticut Valley north to Wells River.

Q. bicolor Willd. (*Q. platanoides* Sudw.). Swamp White Oak. Low moist soil; frequent in the Champlain Valley, especially near the Lake.

Q. ilicifolia Wang. (*Q. nana* Sargent). Bear or Black Scrub Oak. Dry sandy soil; Rutland, (Pursh. in 1806); "Bellows Falls," (Carey); Brattleboro, (Grout); Westminster and West Dummerston, (W. H. Blanchard).

Q. macrocarpa Michx. Bur Oak, Over-cup or Mossy-cup Oak. Rich soil; occasional in the Champlain Valley, more common in Addison County.

Q. Muhlenbergii Engelm. Yellow Oak, Chestnut Oak. Gardiner's Island, Ferrisburg, (Pringle); Mallets Head, Colchester, (Griffin).

Q. prinoides Willd. Scrub Chestnut Oak. Dry hillsides; "Pownal," (Robbins); North Pownal, (Eggleson); Snake Mountain, (Brainard).

Q. Prinus L. Chestnut Oak. Dry rocky hillsides in western Vermont, frequent from Charlotte to Pownal.

Q. rubra L. Red Oak. Common below 1,000 feet altitude. Var. *ambigua* (Michx. f.) Fernald. (*Q. borealis* Michx. f.). Gray Oak. Rocky woods, Burlington, (Burns).

Q. velutina Lam. Quercitron, Yellow-barked or Black Oak. Dry light soil; frequent in western Vermont and in the Connecticut Valley north to Bellows Falls.

Q. macrocarpa x alba. Charlotte, (Pringle).

Q. Prinus x alba. Monkton, (Pringle).

URTICACEAE. NETTLE FAMILY

BOEHMERIA. False Nettle

B. cylindrica (L.) Sw. Moist shady ground in the lower altitudes; common.

CANNABIS. Hemp

C. sativa* L. Waste places; occasional.

CELTIS. Nettle Tree, Hackberry

C. occidentalis L. Sugargrass. River banks and intervals; rare.

HUMULUS. Hop

H. japonicus* Sieb. & Zucc. Japanese Hop. Waste places; Burlington, (Jones); Brattleboro, (Anne S. Angell); Bellows Falls, (W. H. Blanchard).

H. Lupulus L. Common Hop. Occasional by waysides as an escape from cultivation.

LAPORTEA. Wood Nettle

L. canadensis (L.) Gaud. (*Utricastrum divaricatum* [L.] Kuntze).
Moist rich woods; common.

MORUS. Mulberry

M. alba* L. White Mulberry. Often planted and occasionally escaped.
Middlebury, (Brainerd); Burlington, (Mrs. N. F. Flynn).

M. rubra L. Red Mulberry. Rich woods; rare. Pownal, (Oakes);
North Pownal, (Eggleson).

PARIETARIA. Pellitory

P. pennsylvanica Muhl. Rocky banks and cliffs; occasional in western Vermont. Jamaica, (Wheeler).

PILEA. Richweed. Clearweed

P. pumila (L.) Gray. Cool moist woods in the lower altitudes; common.

ULMUS. Elm

U. americana L. American or White Elm. Moist soil; common.

U. campestris* L. English Elm. Escaped to roadside, Colchester, (Mrs. N. F. Flynn).

U. fulva Michx. Slippery or Red Elm. Rich rocky woods; occasional.

U. racemosa Thomas. (*U. Thomasi* Sarg.). Cork Elm. Limestone soils, western Vermont; rare.

URTICA. Nettle

U. gracilis Ait. Slender or Tall White Nettle. Fence rows and moist ground; common.

U. Lyallii Wats. (*U. gracilis*, Gray's Manual, ed. 6, in part). Alluvial thickets and waste places; occasional.

U. urens* L. Small or Dwarf Nettle. Waste places; Barnet, (Blanchard); Royalton, (Ward).

SANTALACEAE. SANDALWOOD FAMILY

COMANDRA. Bastard Toad Flax

C. lividia Richards. Summit of Mt. Mansfield under stunted balsams, (Pringle).

C. Richardsiana Fernald. Dry sandy or gravelly soil along Lake Champlain; frequent.

C. umbellata (L.) Nutt. Dry thickets of the lower altitudes in western Vermont; frequent.

LORANTHACEAE. MISTLETOE FAMILY

ARCEUTHOBIA. (RAZOUMOFSKYA)

A. pusillum Peck. Dwarf Mistletoe. Parasitic on spruces and tamaracks, mainly in swamps; occasional. Rhod. 2: 1.

ARISTOLOCHIACEAE. BIRTHWORT FAMILY

ASARUM. Wild Ginger

A. canadense L. Rich rocky woods; common.

POLYGONACEAE. BUCKWHEAT FAMILY

FAGOPYRUM. Buckwheat

F. esculentum* Moench. (F. Fagopyrum [L.] Karst.). Buckwheat. Persisting from cultivation.

F. tartareum* (L.) Gaertn. India Wheat. Persisting in cultivated fields.

POLYGONELLA. Jointweed

P. articulata (L.) Meisn. Coast Jointweed or Knot Grass. Sandy shore of Lake Champlain, Colchester, (Pringle, Mrs. N. F. Flynn); Brattleboro, 1844, (T. W. Higginson); Highgate, (Blewitt); Milton, (Griffin).

POLYGONUM. Knotweed.

P. acre HBK., var. **leptostachyum** Meisn. (Persicaria punctata, var. leptostachyum Small). Water Smartweed. Wet meadows of the lower altitudes of western Vermont; occasional.

P. amphibium L. (Persicaria amphibia [L.] S. F. Gray). Water Persicaria. Margins of ponds and slow streams; frequent. Var. **Hartwrightii** (Gray) Bissell. (Persicaria Hartwrightii Gray). Marshes; occasional. Forma **terrestre** (Leers) Blake. Colchester, Fairfield and Swanton, (Blake).

P. arifolium L. (Tracaulon arifolium [L.] Raf.) Halberd-leaved Tear-thumb. Low grounds; frequent in Champlain Valley. East Clarendon, (Kirk); Pownal, (Eggleston).

P. aviculare L. Knotgrass, Doorweed. Dooryards and roadsides; common.

P. aviculare L., var. **angustissimum** Meisn. (P. neglectum Besser). Sandy beaches; occasional.

P. aviculare L., var. **vegetum** Ledeb. In moister situations than type; frequent.

P. Careyi Olney. (Persicaria Careyi [Olney] Greene). Brattleboro, (Frost, Grout); Newfane, (Grout); Cavendish Gorge, (Fernald); Westminster, (W. H. Blanchard); Stowe, (Mrs. Carrie E. Straw).

P. cilinode Michx. (Tiniaria cilinode [Michx.] Small). Fringed Black Bindweed. Rocky copses; frequent.

P. Convolvulus* L. (*Tiniaria Convolvulus* [L.] Webb & Moq.). Black Bindweed, Wild Buckwheat. Cultivated ground; common.

P. Douglasii Greene. Dry soil; occasional in the Champlain Valley.

P. erectum L. Erect Knotweed. Dooryards and roadsides; occasional.

P. Hydropiper L. Common Smartweed or Water Pepper, Bite-tongue. (*Persicaria Hydropiper* [L.] Opir.). Moist places; common.

P. hydropiperoides Michx. (*Persicaria hydropiperoides* [Michx.] Small). Mild Water Pepper. Wet places and shallow water in the lower altitudes; occasional.

P. lapathifolium L. (*P. incarnatum* of auth.; *Persicaria lapathifolia* [L.] S. F. Gray). Dock-leaved or Pale Persicaria. Alluvial soil; common. Var. **nodosum** (Pers.) Weinmann. Frequent.

P. Muhlenbergii (Meisn.) Wats. (*Persicaria Muhlenbergii* [S. Wats.] Small). Muddy or dry places of the lower altitudes of western Vermont; frequent.

P. orientale* L. (*Persicaria orientalis* [L.] Spach.). Prince's Feather. Occasionally persisting about gardens.

P. pennsylvanicum L. (*Persicaria pennsylvanica* [L.] Small). Pink Knotweed. Moist soil; common.

P. Persicaria* L. (*Persicaria Persicaria* [L.] Small). Lady's Thumb. Waste places; a common weed.

P. sagittatum L. (*Tracaulon sagittatum* [L.] Small). Arrow-leaved Tear-thumb. Low ground; common.

P. scandens L. (*P. dumetorum* L., var. *scandens* Gray; *Tiniaria scandens* [L.] Small). Climbing False Buckwheat. Moist thickets; frequent.

P. tomentosum Schrank. (*Persicaria tomentosa* [Schrank] Bicknell). Field, Rutland, (Kirk).

P. virginianum L. (*Tovara virginiana* [L.] Raf.). Moist thickets of the lower altitudes; occasional.

P. viviparum L. (*Bistorta vivipara* [L.] S. F. Gray). Mt. Mansfield, (Pringle).

RUMEX. Dock. Sorrel

R. Acetosa* L. Garden Sorrel. Charlotte, (Pringle); Burlington, (Jones); Woodstock, (Mrs. Clara Mack).

R. Acetosella* L. Field or Sheep Sorrel. Fields; common.

R. Britannica L. Great Water Dock. Wet places in the low altitudes of western Vermont; frequent.

R. crispus* L. Yellow Dock, Curled Dock. Fields and waste places; common.

R. elongatus* Guss. Fields; common.

R. mexicanus Meisn. Waste places; Colchester, (Sprague); Burlington and Rutland, (Mrs. N. F. Flynn); St. Albans, (Blake); Fairhaven, (Brainerd).

R. obtusifolius* L. Bitter Dock. Fields and waste places; common.

R. Patientia* L. Patience Dock. Cultivated fields and roadsides; occasional; apparently becoming more common.

R. verticillatus L. Swamp Dock. Swamps; common in the western counties.

CHENOPodiaceae. GOOSEFOOT FAMILY

ATRIPLEX. Orach

A. patula L., var. **hastata** (L.) Gray. (*A. hastata* L.). Spreading Orach. Waste places, especially along railways; naturalized; occasional. Var., **littoralis** (L.) Gray. (*A. hastata* L.). Sandy shores; occasional.

CHENOPodium. Pigweed. Goosefoot

C. album* L. Lamb's Quarters, Pigweed. Fields; common. Var., **viride*** (L.) Moq. Common.

C. ambrosioides* L. Mexican Tea. Charlotte, (Pringle); Colchester, (Mrs. N. F. Flynn); St. Albans, (Blewitt).

C. Botrys* L. Jerusalem Oak, Feather Geranium. Waste places; becoming common.

C. capitatum (L.) Asch. (*Blitum capitatum* L.). Strawberry Blite. Dry rich ground; apparently indigenous in places, occasionally introduced.

C. glaucum* L. Oak-leaved Goosefoot. Railroad yards, Burlington, Bennington, Ferrisburg, Rutland, St. Albans.

C. hybridum L. Maple-leaved Goosefoot. Shady ledges and waste places; frequent.

C. urbicum* L. City or Upright Goosefoot. Lumber yards, Burlington, (Howe); West Haven, (Kirk and Ross).

KOCHIA

K. Scoparia* (L.) Schrad. Mexican Fire Plant. Frequently spontaneous and sometimes persisting.

SALSOLA. Saltwort

S. Kali L., var. **tenuifolia*** G. F. W. Mey. Russian Thistle. Of recent introduction along railroads; Burlington, (Mrs. N. F. Flynn); Colchester, (Jones); Rutland, (Kirk); Essex Junction and Swanton, (Blake).

AMARANTHACEAE. AMARANTH FAMILY

ACNIDA. Water Hemp

A. tuberculata Moq. Shady banks of slow streams or bays, Champlain Valley; frequent.

AMARANTHUS. Amaranth

A. blitoides Wats. Prostrate Amaranth. Yards and waste places; occasional, becoming more common.

A. graecizans L. (*A. albus* L.). Tumble Weed. Waste places; a recently introduced weed in railroad yards and gardens. Burling-

ton, Charlotte, (Pringle); Bennington, (Eggleson); Rutland, (Kirk).

- A. *hybridus** L. Green Amaranth, Pigweed. Old garden, Peacham, (Blanchard); along railroad, Rutland, (Kirk).
- A. *caudatus** L. Purple Amaranth. Shelburne, as a garden weed, (Pringle); West Windsor, (Blanchard).
- A. *retroflexus** L. Green Amaranth, Pigweed. Rich cultivated ground; common.
- A. *spinosus** L. Spiny Amaranth. Cultivated field, Burlington, (Mrs. Jane Walker).

PHYTOLACCACEAE. POKEWEED FAMILY

PHYTOLACCA. Pokeweed

- P. *decandra* L. (*P. americana* L.). Common Poke or Scoke, Pigeon Berry. Pastures and fields; occasional.

NYCTAGINACEAE. FOUR-O'CLOCK FAMILY

OXYBAPHUS

- O. *floribundus* Chois. (*Allionia nyctaginea* Michx.). Along railroad, Swanton, (Blake).
- O. *nyctagineus* (Michx.) Sweet. St. Johnsbury, (Inez A. Howe).

ILLECEBRACEAE. KNOTWORT FAMILY

ANYCHIA. Forked Chickweed

- A. *canadensis* (L.) BSP. (*A. capillacea* DC.). Dry open woodlands; Pownal, (Robbins, Eggleson); West Rutland, (Eggleson); Proctor, (Kirk); Bellows Falls, (W. H. Blanchard).

AIZOACEAE. CARPET WEED FAMILY

MOLLUGO. Indian Chickweed

- M. *verticillata** L. Carpet Weed. Sandy banks and waste places; frequent.

CARYOPHYLLACEAE. PINK FAMILY

AGROSTEMMA. Corn Cockle

- A. *Githago** L. (*Lychnis Githago* Scop.). Corn Cockle, Rose Pink. Fields; occasional.

ARENARIA. Sandwort

- A. *groenlandica* (Retz.) Spreng. Mountain Sandwort. Common on rocks at summits of Mt. Mansfield and Camel's Hump.
- A. *lateriflora* L. Blunt-leaved Sandwort. (*Moehringia lateriflora* Fenzl.). Moist banks and shores of the lower altitudes; occasional.
- A. *macrophylla* Hook. (*Moehringia macrophylla* [Hook.] Torr.). Large-leaved Sandwort. Abundant on ledges above Proctorsville, (Eggleson).

A. serpyllifolia* L. Thyme-leaved Sandwort. Dry rocky places; frequent.

A. stricta Michx. (A. Michauxii Hook. f.). Rock Sandwort. Cliffs and headlands of the lower altitudes; occasional.

A. verna L., var. **propinqua** (Richards.) Fernald. Smugglers' Notch, (Pringle).

CERASTIUM. Mouse-ear Chickweed

C. arvense L. Field Mouse-ear Chickweed. Dry rocky places of the lower altitudes; occasional.

C. nutans Raf. (C. longipedunculatum Muhl.). Nodding Chickweed, Powder Horn. Thin soil on ledges, west of the Green Mountains; occasional.

C. vulgatum* L. Common Mouse-ear Chickweed. Fields; common.

DIANTHUS. Pink

D. Armeria* L. Deptford Pink. Fields; Castleton, (Ross).

D. barbatus* L. Sweet William. Garden escape; Rutland, (Eggles-ton); Stowe, (Wild); Manchester, (Miss Mary A. Day); Essex, (Mrs. N. F. Flynn).

D. deltoides* L. Maiden Pink. Roadsides and cemeteries; occasional.

D. plumarius* L. Grass Pink. Garden escape; Manchester, (Mrs. Mary C. Munson); East Wallingford, (Kent).

GYPSOPHILA

G. muralis* L. Low Gypsophila, Mist. Burlington, (Jones); Colchester, (Mrs. N. F. Flynn).

G. paniculata* L. Baby's Breath. Stowe, (Mrs. Carrie E. Straw).

LYCHNIS. Campion

L. alba* Mill. (L. vespertina Sibth.). White Campion, Evening Lychnis. Weed in fields; occasional.

L. chalcedonica* L. Scarlet Lychnis. Peacham, (Blanchard); Barnet, (Jesup and Sargent).

L. coronaria* (L.) Desr. Mullein Pink. Rocky pastures; abundant on Round Mountain, Shrewsbury, (Eggles-ton); Jamaica, (Bates).

L. dioica* L. (L. diurna Sibth.). Day-blooming Lychnis. Brattleboro, (Bates and Jones); Burlington, (Morse); Colchester, (Mrs. N. F. Flynn).

L. Flos-cueuli* L. Ragged Robin. Weed, roadsides and meadows, Craftsbury, (Jones); field, Rutland, (Kirk).

SAGINA. Pearlwort

S. decumbens (Ell.) T. & G. Small-flowered Pearlwort. Brattleboro, (Grout).

S. procumbens L. Pearlwort. Springy places; occasional.

SAPONARIA

S. officinalis* L. Soapwort, Bouncing Bet. Waste places; common.

S. Vaccaria* L. (Vaccaria Vaccaria Britton). Cow-herb. Vernon, (Grout); Westmore, (J. R. Churchill); Pownal, (Egglesston); Rutland, (Kirk); Burlington, (Mrs. N. F. Flynn).

SILENE. Catchfly. Campion

S. antirrhina L. Sleepy Catchfly. Dry soil in the lower altitudes; frequent.

S. Armeria* L. Sweet William Catchfly. Underhill, (Jones); Burlington, (Mrs. N. F. Flynn).

S. dichotoma* Ehrh. Forked Catchfly. Townshend, (Blanchard).

S. latifolia* (Mill.) Britten & Rendle. (S. Cucubalus Wibel). Bladder Campion. Roadsides and fields; frequent.

S. noctiflora* L. Night-flowering Catchfly. Fields and waste places; frequent.

S. stellata (L.) Ait. f. Starry Campion. Specimen in herbarium of the Jardin des Plantes, Paris, labeled "Vermont" by Michaux.

SPERGULA. Spurrey

S. arvensis* L. Corn Spurrey. Fields; occasional.

S. sativa* Boenn. Field Spurrey. Burlington, (Hazen).

SPERGULARIA. (TISSA). Sand Spurrey

S. rubra (L.) J. & C. Presl. Sand Spurrey. Royalton, (Ward); Brattleboro, (Grout); Mt. Holly, (Egglesston).

STELLARIA. (ALSINE). Chickweed. Starwort.

S. aquatica* (L.) Scop. Abundant in a swamp, North Pownal, (Woodward).

S. borealis Bigel. Northern Stitchwort or Starwort. Cold wet places in the mountains; frequent. Burlington, (Mrs. N. F. Flynn).

S. graminea* L. Lesser Stitchwort or Starwort. Roadsides and moist grass lands; frequent. Var. *latifolia** Peterm. Damp grassy place, Williston, (Mrs. N. F. Flynn).

S. longifolia Muhl. Long-leaved Stitchwort or Starwort. Damp intervals and thickets; occasional.

S. media* (L.) Cyrill. Common Chickweed. In lawns and waste places; abundant.

S. uliginosa Murr. About cold springs, Rochester, Chittenden, (Eggles-ton); Vernon, (Grout); Rutland, (Kirk); Wallingford, (Kent); Brandon, (Dutton).

POTULACACEAE. PURSLANE FAMILY

CLAYTONIA. Spring Beauty

C. caroliniana Michx. Spring Beauty. Rich, open woods; common.

C. virginica L. Spring Beauty. Intervale in Colchester, (Torrey, Jones); New Haven, (Pringle).

POTULACA. Purslane

P. oleracea* L. Common Purslane. Garden weed; common.

CERATOPHYLLACEAE. HORNWORT FAMILY

CERATOPHYLLUM. Hornwort

C. demersum L. Slow streams and ponds; frequent.

NYMPHAEACEAE. WATER LILY FAMILY

BRASENIA. Water Shield

B. Schreberi Gmel. (B. peltata Pursh). Ponds; occasional.

CASTALIA. Water Lily

C. odorata (Ait.) Woodville & Wood. Sweet-scented Water Lily. Ponds and slow streams; common.

C. tuberosa (Paine) Greene. White Pond Lily. Lake Champlain and tributaries; frequent.

NYMPHAEA. Yellow Pond Lily. Spatter Dock

N. advena Ait. Cow Lily, Yellow Pond Lily, Spatter Dock. Common in ponds and slow streams. Var. **variegata** (Engelm.) Fernald. With type.

N. microphylla Pers. Small Yellow Pond Lily. Ponds and streams; frequent.

N. rubrodisca (Morong) Greene. Probably a hybrid between the two preceding species. Ponds and slow streams; occasional.

RANUNCULACEAE. CROWFOOT FAMILY

ACTAEA. Baneberry. Cohosh

A. alba (L.) Mill. White Baneberry. Rich woods; common.

A. rubra (Ait.) Willd. Red Baneberry. Rich woods; common. Forma **neglecta** (Gill.) Robinson. Rare.

A. alba x rubra. Occasional.

ANEMONE. Anemone

A. canadensis L. (A. pennsylvanica L.). Round-headed Anemone. Stony banks; common along Lake Champlain and its tributaries.

A. cylindrica Gray. Long-fruited Anemone. Dry woods and fields of the lower altitudes; frequent.

A. multifida Poir. (A. hudsoniana Richards.). Cut-leaved Anemone. Colchester and Winooski Falls, (Robbins); Highgate Springs, (Jesup).

A. quinquefolia L. (A. nemorosa L., var. **quinquefolia** Gray). Wind Flower, Wood Anemone. Woodlands of the lower altitudes; common.

A. riparia Fernald. Gravelly and rocky banks; frequent in western and northern Vermont.

A. virginiana L. Tall Anemone. Woods and meadows of the lower altitudes; common.

ANEMONELLA. (SYNDESMON)

A. thalictroides (L.) Spach. Rue Anemone. North Pownal, common on rich wooded hills, (Egglesston).

AQUILEGIA. Columbine

A. canadensis L. Wild Columbine. Rocky places; common.

A. vulgaris* L. Garden Columbine. Common in gardens, occasional as a wayside escape, and locally abundant in Franklin County.

CALTHA. Marsh Marigold

C. palustris L. Cowslips. Wet meadows and swamps; common.

CLEMATIS. Virgin's Bower

C. verticillaris DC. (*Atragene americana* Sims.). Purple Clematis. Rocky woods of the lower altitudes; occasional.

C. virginiana L. Wild Clematis, Virgin's Bower, Traveler's Joy. River banks and moist thickets; common.

COPTIS. Goldthread

C. trifolia (L.) Salisb. Wet woods; common.

DELPHINIUM. Larkspur

D. Ajacis* L. Rocket Larkspur. Adventive; Middlebury, (Brainerd); Westminster, (Egglesston).

HEPATICA. Hepatica. Liverleaf

H. acutiloba DC. Sharp-lobed Hepatica. Woods; common.

H. triloba Chaix. Round-lobed Hepatica. (*H. Hepatica* Karst.). Warm open woods of the lower altitudes; frequent.

HYDRASTIS. Orange-root. Yellow Puccoon

H. canadensis L. Golden Seal. Shelburne, (Horsford); Weybridge, (Egglesston).

RANUNCULUS. Buttercup. Crowfoot

R. abortivus L. Small-flowered Crowfoot. Shady banks; common.

R. abortivus L., var. **eucyclus** Fernald. Cool woods; North Pownal, (Egglesston); West Haven, (Kirk); Burlington, (Mrs. N. F. Flynn).

R. acris* L. Tall Crowfoot or Buttercup. Everywhere common as a weed in grass lands. Var. **Steveni*** (Andrz.) Lange. Common.

R. allegheniensis Britton. Mountain Crowfoot. Smugglers' Notch, (E. F. Williams); West Haven, (Kirk).

R. aquatilis L., var. **capillaceus** DC. (*Batrachium trichophyllum* [Chaix] Bosch.). Common White Water Crowfoot. Ponds and slow streams; frequent.

R. bulbosus* L. Bulbous Crowfoot or Buttercup. Sparingly introduced in fields.

R. circinatus Sibth. Stiff Water Crowfoot. (*Batrachium* S. F. Gray). Ponds and slow streams; rare.

R. delphinifolius Torr. Yellow Water Crowfoot. Still water and muddy banks of the lower altitudes; occasional. Var. *terrestris* (Gray) Farwell. Occasional.

R. fascicularis Muhl. Early Crowfoot. "Burlington," (Torrey); "Norwich," (Blanchard); "Brattleboro," (Frost); Snake Mountain, (Brainerd).

R. Flammula L., var. *reptans* (L.) Mey. (*R. reptans* L.) Creeping Spearwort. Sandy shores of the lower altitudes; frequent.

R. hispidus Michx. Wood or Early Buttercup. Abundant on dry hills, North Pownal, (Eggleson).

R. micranthus Nutt. Rock Crowfoot. Coventry, (Cushman).

R. pennsylvanicus L. f. Bristly Crowfoot. Wet places of the lower altitudes; frequent.

R. recurvatus Poir. Hooked Crowfoot. Moist woods and swamps; frequent; common in Windsor County.

R. repens L. Creeping Crowfoot or Buttercup. In lawns; Burlington, (Jones); Rutland, (Kirk). The double-flowered form of the gardens is found as an escape by wet roadsides; Underhill, (Jones, Mrs. N. F. Flynn); well established at North Dorset, (Mrs. N. F. Flynn).

R. sceleratus L. Cursed Crowfoot. Wet ground; Colchester and Burlington, (Mrs. N. F. Flynn).

R. septentrionalis Poir. Swamp Buttercup. Wet places; common.

THALICTRUM. Meadow Rue

T. confine Fernald. (*T. venulosum* Trel.). Rocky shores of Lake Champlain; occasional.

T. dioicum L. Early Meadow Rue. Rocky woodlands of the lower altitudes; common.

T. polygamum Muhl. Tall Meadow Rue. Moist meadows; common.

MAGNOLIACEAE. MAGNOLIA FAMILY

LIRIODENDRON. Tulip Tree

L. Tulipifera L. Tulip Tree, Yellow Poplar, Whitewood. "Hoosick Valley," (Mrs. Carr); North Pownal, (Eggleson); Perch Pond, Pownal, (Churchill); Bennington, (W. H. Blanchard); Arlington, Vt. Hist. Mag. 121 (1868).

MENISPERMACEAE. MOONSEED FAMILY

MENISPERMUM. Moonseed

M. canadense L. Moist banks and thickets of the Champlain Valley; occasional. "Weathersfield," (Barrows); Westminster, (Blanchard).

BERBERIDACEAE. BARBERRY FAMILY

BERBERIS. Barberry

B. vulgaris* L. Common Barberry. Common in cultivation and a frequent escape. Especially abundant along streams in Ira, (Eggles-ton).

CAULOPHYLLUM. Blue Cohosh

C. thalictroides (L.) Michx. Pappoose Root. Rich woods; common.

PODOPHYLLUM. May Apple. Mandrake

P. peltatum L. "Castleton," (Branch); Middlebury, (Brainerd); common at North Pownal, (Eggles-ton); also occasional as a garden escape.

LAURACEAE. LAUREL FAMILY

BENZOIN. Fever Bush. Wild Allspice

B. aestivale (L.) Nees. Spice Bush, Benjamin Bush. Damp woods of the lower altitudes of western Vermont; rare. Putney and West-minster, (W. H. Blanchard).

SASSAFRAS

S. variifolium (Salisb.) Ktze. (*S. officinale* Nees & Eberm.). Sassafras, Cinnamon Wood. Pownal, (Robbins, Eggles-ton); Hartland and Brattleboro, (Bates); Vernon, (Grout). .

PAPAVERACEAE. POPPY FAMILY

ARGEMONE. Prickly Poppy

A. mexicana* L. Mexican Poppy. Garden escape, Hartland, (Under-wood); Bradford, (Alice E. Bacon).

CHELIDONIUM. Celandine

C. majus* L. Waste places; frequent.

PAPAVER. Poppy

P. Rhoeas* L. Field or Corn Poppy. Persistent in gardens; Burling-ton, (Mrs. N. F. Flynn); Townshend, (W. H. Blanchard).

SANGUINARIA. Bloodroot

S. canadensis L. Borders of rich woods; common.

FUMARIACEAE. FUMITORY FAMILY

ADLUMIA. Climbing Fumitory

A. fungosa (Ait.) Greene. Mountain Fringe, Alleghany Vine. Rich, rocky woods of the lower altitudes; occasional.

CORYDALIS. (CAPNOIDES)

C. aurea Willd. Golden Corydalis. Rocky banks of western Vermont; rare. Norwich, (Jesup); probably introduced.

C. sempervirens (L.) Pers. Pale Corydalis. Rocky woodlands of the lower altitudes; frequent.

DICENTRA. (BIKUKULLA)

D. canadensis (Goldie) Walp. Squirrel Corn. Rich woods; frequent.

D. Cucullaria (L.) Bernh. Dutchman's Breeches. Rich wooded hill-sides; frequent.

FUMARIA. Fumitory

F. officinalis* L. Common Fumitory. Occasionally persistent in old gardens.

CRUCIFERAE. MUSTARD FAMILY

ALLIARIA. Garlic Mustard

A. officinalis* Andrz. (A. Alliaria [L.] Britton). Hedge Garlic. Ludlow, (Brainerd).

ARABIS. Rock Cress

A. brachycarpa (T. & G.) Britton. (A. confinis Wats. in part). Sandy soil and rocky banks; frequent along Lake Champlain.

A. canadensis L. Sickle-pod. Shady ledges of the lower altitudes; occasional.

A. Drummondii Gray. (A. confinis Wats. in great part). Rocky places; occasional along Lake Champlain. Gore Mt., Island Pond, (Underwood); Townshend, (Wheeler).

A. glabra (L.) Bernh. Tower Mustard. Rocks and fields; frequent.

A. hirsuta (L.) Scop. Hairy Rock Cress. Rocky places of the lower altitudes; frequent.

A. laevigata (Muhl.) Poir. Smooth Rock Cress. Rocky places of the lower altitudes; occasional.

A. lyrata L. Low Rock Cress. Mt. Equinox, Manchester, (Mary A. Day); N. Pownal, (Egglesston); West Haven, (G. H. Ross).

BARBAREA. Winter Cress

B. stricta Andrz. Winter Cress. Wet places; common.

B. vulgaris R. Br. (B. Barbarea [L.] MacM.). Common Winter Cress, Yellow Rocket. Wet places; rare.

BERTEROA

B. incana* (L.) DC. Hoary Alyssum. A weed in lawns and by waysides; becoming frequent.

BRASSICA. Mustard. Turnip

B. alba* (L.) Boiss. (Sinapis alba L.). White Mustard. Adventive; rare.

B. arvensis* (L.) Ktze. (*Sinapis arvensis* L.). Charlock. Fields; common.

B. campestris* L. Rutabaga. Fields; frequent.

B. juncea* (L.) Coss. Indian Mustard. Fields; occasional.

B. nigra* (L.) Koch. Black Mustard. Waste places and fields; common.

B. Rapa* L. (*B. campestris* L.). Turnip. Persistent in gardens.

BRAYA

B. humilis (C. A. Mey.) Robinson. (*Arabidopsis novae-angliae* [Rydb.] Britton). Willoughby Mountain, (C. C. Frost, H. Mann).

CAMELINA. False Flax

C. microcarpa* Andrz. Weed in fields; occasional.

CAPSELLA. (BURSA). Shepherd's Purse

C. Bursa-pastoris* (L.) Medic. Shepherd's Purse. Waste places; common.

CARDAMINE. Bitter Cress

C. bulbosa (Schreb.) BSP. (*C. rhomboidea* DC.). Spring Cress. Cold wet meadows; Castleton, (Robbins); Middlebury, (Brainerd); Rutland and Ira, (Eggleson); West Rutland, (Mrs. N. F. Flynn).

C. parviflora L. Small Bitter Cress. Dry rocky woods of lower altitudes; occasional.

C. pennsylvanica Muhl. Bitter Cress, Brook Cress. Cold wet woods; common.

C. pratensis L. Cuckoo Flower. Cold wet meadows in the valleys of the Otter Creek and Castleton River and northward along Lake Champlain; occasional.

CONRINGIA. Hare's-ear Mustard

C. orientalis* (L.) Dumort. Railroad yard, Burlington, (Mrs. N. F. Flynn).

DENTARIA. Pepper-root. Toothwort

D. diphylla Michx. Pepper-root, Crinkle-root. Rich, moist woods; common.

D. laciniata Muhl. Cut-leaved Pepper-root. Rich woods of the Champlain Valley; occasional.

D. maxima Nutt. Large Pepper-root or Toothwort. Shelburne, (Pringle); Burlington, (Perkins); Norwich, (Eggleson); Rutland, (Kirk); Colchester, (Griffin).

DRABA

D. arabisans Michx. Mountain cliffs and headlands of Lake Champlain; occasional. Lake Champlain, (Michaux) in *Herb. Mus. d'Hist. Nat.*, Paris.

D. arabisans Michx., var. **orthocarpa** Fernald & Knowlton. Willoughby Mt., (Deane).
D. stylaris J. Gay. Willoughby Mt., (Tuckerman); Smugglers' Notch, (Pringle).

ERUCA

E. sativa* Mill. (E. Eruca [L.] Britton). Garden Rocket. Stowe, (Mrs. Carrie E. Straw).

ERUCASTRUM

E. Pollichii* Schimp & Spenn. Rhod. 13: 10. Along railroad, St. Albans, (Blake).

ERYSIMUM. (CHEIRINIA). Treacle Mustard

E. cheiranthoides L. Worm-seed Mustard. A weed in fields; common.

HESPERIS. Rocket

H. matronalis* L. Dame's Violet. Garden escape. Middlebury, (Brainard); Monkton, (Eggleson).

LEPIDIUM. Peppergrass. Pepperwort

L. apetalum* Willd. Wild Peppergrass. (L. densiflorum Schrad.). Dry soil, especially along railroads; common.

L. campestre* (L.) R. Br. Field or Bastard Cress. Brattleboro, (Bates); Vergennes and Burlington, (Jones); West Haven, (Kirk); (Westminster, (W. H. Blanchard).

L. virginicum L. Wild Peppergrass. Dry soil, especially along railroads; occasional.

LOBULARIA. (KONIGA). Sweet Alyssum

L. maritima* (L.) Desv. Occasionally spontaneous in gardens and waste places.

RADICULA. Water Cress

R. aquatica (EAT.) Robinson. (Neobeckia aquatica [Eaton] Britton). Lake Cress. Marshy borders of inlets of Lake Champlain; occasional.

R. Armoracia* (L.) Robinson. (Armoracia Armoracia [L.] Britton). Horseradish. Frequently established in wet ground.

R. Nasturium-aquaticum* (L.) Britten & Rendle. (Sisymbrium Nasturtium L.). True Water Cress. Cool running water; Rutland and Bennington, (Eggleson); Charlotte, (Pringle); Randolph, (Bates); Westminster, (W. H. Blanchard).

R. palustris (L.) Moench. Marsh Cress. Wet places; rare.

R. palustris (L.) Moench., var. **hispida** (Desv.) Robinson. (Radicula hispida [Desv.] Britton). Hairy Marsh Cress. Wet places; frequent.

R. sylvestris* (L.) Druce. Creeping Yellow Cress. Alluvial meadows of the Connecticut River; frequent. Wet meadow, South Burlington, (Mrs. N. F. Flynn). Becoming frequent in gardens.

RAPHANUS. Radish

R. Raphanistrum* L. Wild Radish, Jointed Charlock. "South Hero," (Robbins); Windsor, Hartland, (Eggleson); Westminster, (W. H. Blanchard); Rutland, (Kirk); Leicester, (Dutton).

SISYMBRIUM. Hedge Mustard

S. altissimum* L. (*Norta altissima* [L.] Britton). Tumble Mustard. Rapidly being introduced in fields and along roadsides.

S. brachycarpon Richards. (*Sophia pinnata* [Walt.] Greene). Hogback Island, Colchester, (Mrs. N. F. Flynn).

S. officinale* (L.) Scop. (*Erysimum officinale* L.). Bank Cress. Waste ground. Burlington, (Mrs. N. F. Flynn); Brandon, (Dutton); Rutland, (Kirk); Colchester and Shelburne, (Blake).

S. officinale (L.) Scop., var. **leiocarpum*** DC. Bank Cress. Waste ground; common.

SUBULARIA. Awlwort

S. aquatica L. Abundant in South Pond, Marlboro, (Grout).

THLASPI. Penny Cress

T. arvense* L. Field Penny Cress or Mithridate Mustard. Waste places; occasional.

CAPPARIDACEAE. CAPER FAMILY

POLANISIA

P. graveolens Raf. Clammy-weed. Sandy shores of Lake Champlain; common.

RESEDACEAE. MIGNONETTE FAMILY

RESEDA. Mignonette. Dyer's Rocket

R. alba* L. White Mignonette. Garden escape; Hartland, (Helen Crandall).

SARRACENIACEAE. PITCHER PLANT FAMILY

SARRACENIA

S. purpurea L. Side-saddle Flower, Pitcher Plant. Sphagnum bogs; frequent. Var. **heterophylla** (Eat.) Torr. With type.

DROSERACEAE. SUNDEW FAMILY

DROSERA. Sundew

D. longifolia L. (*D. intermedia* Hayne). Long-leaved Sundew. Bogs of the lower altitudes; rare.

D. rotundifolia L. Round-leaved Sundew. Bogs and wet banks; occasional.

PODOSTEMACEAE. RIVER WEED FAMILY

PODOSTEMUM. River Weed.

P. ceratophyllum Michx. River Weed, Thread-foot. "Brattleboro," (Frost); West River, Jamaica, (Dobbin).

CRASSULACEAE. ORPINE FAMILY

PENTHORUM. Ditch Stonecrop

P. sedoides L. Ditches and swamps of the lower altitudes; frequent.

SEDUM. Stonecrop. Orpine

S. acre* L. Mossy Stonecrop. On rocks; occasional.

S. triphyllum* (Haw.) S. F. Gray. (*S. purpureum* Tausch). Rhod. 11: 46. Garden Orpine, Live-for-ever. Fields and roadsides; common.

S. roseum (L.) Scop. (*Rhodiola rosea* L.) Mt. Horrid, Rochester, (Dutton).

S. telephiooides Michx. Roadside escape, Colchester, (Mrs. N. F. Flynn).

SAXIFRAGACEAE. SAXIFRAGE FAMILY

CHRYSSOPLIUM. Golden Saxifrage

C. americanum Schwein. Wet shady places; common.

MITELLA. Miterwort. Bishop's Cap

M. diphylla L. Rich woods; common.

M. nuda L. Deep moist woods, in moss; frequent.

PARNASSIA. Grass of Parnassus

P. caroliniana Michx. Wet banks and meadows; common in Bennington County; locally abundant in Hartland, (Underwood); occasional elsewhere.

RIBES. Currant. Gooseberry

R. americanum Mill. (*R. floridum* L'Her.). Rhod. 11: 46. Wild Black Currant. Moist rich woods; frequent.

R. Cynosbati L. (*Grossularia Cynosbati* [L.] Mill.). Prickly Gooseberry, Dogberry. Rocky woods; common.

R. lacustre (Pers.) Poir. Swamp Black Currant. Cold swamps and mountain woods; frequent.

R. oxyacanthoides L. (*Grossularia oxyacanthoides* [L.] Mill.). Smooth Gooseberry. Cold swamps; frequent.

R. prostratum L'Her. (*R. glandulosum* Grau.). Skunk Currant. Cold banks and mountain woods; frequent.

R. triste Pall. Swamp Red Currant. Cold swamps, mostly in the mountains. Var. *albinervium* (Michx.) Fernald. Swamps; more common than type.

R. vulgare* Lam. Garden Red Currant. Occasionally persists as an escape.

SAXIFRAGA. Saxifrage

S. aizoides L. (*Leptasea aizoides* [L.] Haw.). Yellow Mountain Saxifrage. Moist cliffs, Willoughby Mountain, (A. Wood); Smugglers' Notch, (Pringle).

S. Aizoon Jacq. (*Chondrola Aizoon* [Jacq.] Haw.). Willoughby Mountain, Smugglers' Notch, Hazen's Notch, Montgomery, (Pringle); Mt. Horrid, Rochester, (Dutton).

S. oppositifolia L. (*Antiphylla oppositifolia* [L.] Fourn.). Mountain Saxifrage. Willoughby Mountain, (A. Wood); Smugglers' Notch, (Pringle).

S. pennsylvanica L. (*Micranthes pennsylvanica* [L.] Haw.). Swamp Saxifrage. Bogs; common.

S. virginiensis Michx. (*Micranthes virginensis* [Michx.] Small). Early Saxifrage. Exposed rocks and dry hillsides; common.

TIARELLA. False Miterwort

T. cordifolia L. Rich moist woods; common.

HAMAMELIDACEAE. WITCH-HAZEL FAMILY

HAMAMELIS. Witch-hazel

H. virginiana L. Low woods; common.

PLATANACEAE. PLANE TREE FAMILY

PLATANUS. Sycamore. Buttonwood

P. occidentalis L. Alluvial banks of the lower altitudes of western Vermont and north in the Connecticut Valley to Hartford; occasional.

ROSACEAE. ROSE FAMILY

AGRIMONIA. Agrimony

A. gryposepala Wallr. (*A. hirsuta* Bicknell; *A. Eupatoria* Gray's Manual, ed. 6 in part not L.). Stickseed, Cocklebur. Woods and thickets; frequent.

A. striata Michx. (*A. Brittoniana* Bicknell; *A. Eupatoria* Gray's Manual, ed. 6 in part not L.). Stickseed, Beggar-ticks. Thickets and roadsides especially in mountain towns; occasional.

AMELANCHIER. Shadbush. Juneberry. Service Berry

A. Bartramiana (Tausch.) Roemer. (*A. oligocarpa* [Michx.] Roem. Gray's Manual, ed. 7). Summits of high mountains and cold swamps; occasional.

A. canadensis (L.) Medicus. (*A. canadensis*, var. *Botryapium* [L. f.] T. & G.). Southern slopes of the lower altitudes; frequent.

A. humilis Wiegand. *Rhod.* 14: 141. (*A. spicata* Am. auth. in part). Limestone headlands and cliffs in the Champlain Valley; occasional.

A. laevis Wiegand. *Rhod.* 14: 154. (*A. canadensis* [L.] Medic.). Woods; common.

A. sanguinea (Pursh.) DC. (*A. rotundifolia* Roem.; *A. spicata* [Lam.] C. Koch). Rocky shores of the upper Connecticut and Champlain Valleys; occasional.

A. stolonifera Wiegand. *Rhod.* 14: 144. Rocky woods; frequent.

CRATAEGUS. Hawthorn. Thorn-apple

C. albicans Ashe. (*C. polita* Sarg. *Rhod.* 5: 11). Occasional in the lower altitudes.

C. alnorum Sarg. *Rhod.* 5: 153. (*C. Edsoni* Sarg. *Rhod.* 7: 205; *C. contigua* Sarg. *Rhod.* 5: 115). Burlington, (A. W. Edson); Stockbridge, (Eggleson); Bellows Falls and Westminster, (W. H. Blanchard).

C. anomala Sarg. *Rhod.* 3: 74. Clarendon, (Eggleson); Bridport, (Brainerd).

C. Boyntoni Beadle. (*C. foetida* Ashe). Vernon, (W. H. Blanchard).

C. Brainerdi Sarg. *Rhod.* 3: 27. Lower altitudes; occasional. Var. *scabrida* (Sarg.) Egg. (*C. scabrida* Sarg. *Rhod.* 3: 29). Middlebury, (Brainerd); West Rutland and Bennington, (Eggleson).

C. Brainerdi Sarg., var. *Egglesoni* (Sarg.) Robinson. (*C. Egglesoni* Sarg. *Rhod.* 3: 30). Common; particularly in the hill towns; reaching an altitude of 2,300 feet. Var. *asperifolia* (Sarg.) Egg. (*C. asperifolia* Sarg. *Rhod.* 3: 31). Middlebury, (Brainerd).

C. champlainensis Sarg. *Rhod.* 3: 20. Champlain Valley; frequent. Birdseye Mt., Ira, (Kirk).

C. chrysocarpa Ashe. (*C. rotundifolia* Borckh.; *C. coccinea rotundifolia* Sarg. *Bot. Gaz.* 31: 14; *C. Gravesii* Sarg. *Rhod.* 5: 159). Champlain and Connecticut Valleys; occasional.

C. chrysocarpa Ashe, var. **Faxoni** (Sarg.) Egg. (*C. Faxoni* Sarg. *Rhod.* 5: 161). With type.

C. coccinioides Ashe, var. **dilatata** (Sarg.) Egg. (*C. dilatata* Sarg. *Bot. Gaz.* 31: 9). Addison County; common. (Brainerd).

C. Crus-galli* L. Cockspur Thorn. Ferrisburg, (Horsford); Mt. Independence, (Eggleson); Gardiner's Island, Ferrisburg, (C. E. Pinney); Chimney Point, (Brainerd); West Haven, (Kirk and Ross). This species is unquestionably introduced in the State.

C. filipes Ashe. (*C. silvicola* Beadle, var. *Beckwithae* [Sarg.] Egg.; *C. Robbinsiana* Sarg. *Rhod.* 7: 197). Putney and Westminster, (W. H. Blanchard); Burlington, (Eggleson).

C. Grayana Eggleson. *Rhod.* 10: 80. (*C. flabellata* Sarg. *Rhod.* 3: 75). Bellows Falls and Westminster, (W. H. Blanchard).

C. intricata J. Lange. (*C. coccinea* Eggleson in Gray's Manual; *C. modesta* Sarg. *Rhod.* 3: 28). West Rutland, Arlington, (Eggleson); Carver's Falls, West Haven, (Eggleson, Kirk and Ross).

C. irrasa Sarg., var. **Blanchardi** (Sarg.) Egg. (C. Blanchardi Sarg. Rhod. 7: 208). Wilmington and Whitingham, (Eggleson).

C. Jesupi Sarg. Rhod. 5: 61. Twin Mts., West Rutland, (Eggleson).

C. Kennedyi Sarg. Tree and Shrubs 2: 73, 134. (C. media Egg. Rhod. 6: 141). Summit of Willoughby Mt., about 2,600 ft. alt., (E. Faxon, Eggleson, Kennedy). Rare and local.

C. lucorum Sarg., var. **insolens** (Sarg.) Egg. Rhod. 10: 79. (C. insolens Sarg. Rhod. 7: 217). West Concord, (Eggleson).

C. macrosperma Ashe. (C. delucida Sarg. Rhod. 5: 139). Common in the lower altitudes. Var. **demissa** (Sarg.) Egg. (C. demissa Sarg. Rhod. 5: 139). Burlington, (Eggleson). Var. **pentandra** (Sarg.) Egg. Rhod. 10: 80. (C. pentandra Sarg. Rhod. 3: 25). With the type; occasional.

C. macrosperma Ashe, var. **pastorum** (Sarg.) Egg. Rhod. 10: 80. (C. *pastorum* Sarg. Rhod. 3: 24; C. *genialis* Sarg. Rhod. 5, 148). Moist lowland and pastures; occasional. Var. **matura** (Sarg.) Egg. (C. *matura* Sarg. Rhod. 3: 24). With the type.

C. monogyna* Jacq. (C. *Oxyacantha* of the Manuals). English Hawthorn. Occasionally escaped from cultivation. Peacham, (Blanchard); Burlington, (Jones); Knight's Island, (Brainerd).

C. neofluvialis Ashe. (C. *macracantha* Lodd., var. *neofluvialis* [Ashe] Egg. Rhod. 10: 83). Cornwall, (Brainerd).

C. Oakesiana Eggleson. Torreya 7: 35. Bloomfield, Lemington, (Eggleson); Canaan, (Frizzell). Common along the Connecticut River.

C. Pringlei Sarg. Rhod. 3: 21. Charlotte, (Pringle); Middlebury, (Brainerd); Rutland, (Eggleson); Westminster, (W. H. Blanchard). Var. **exclusa** (Sarg.) Egg. (C. *exclusa* Sarg. Rhod. 5: 108). With the type; occasional. Var. **lobulata** (Sarg.) Egg. (C. *lobulata* Sarg. Rhod. 3: 22). Addison County, (Brainerd).

C. pruinosa (Wendl.) K. Koch. Occasional in the lower altitudes. Forma **dissona** (Sarg.) Egg. Rhod. 10: 81. (C. *dissona* Sarg. Rhod. 5: 60). Putney, (W. H. Blanchard). Var. **philadelphica** (Sarg.) Egg. (C. *philadelphica* Sarg. Proc. Acad. Sci., Philadelphia, 588 [1905]). Burlington, (Eggleson).

C. punctata Jacq. Dotted Thorn. Common and widely distributed throughout the lower levels and reaching at least 1,500 feet in altitude. Var. **canescens** Britton. With the type; rare. Var. **rubra** Ait. With the type; common.

C. roanensis Ashe. (C. *ascendens* Sarg. Rhod. 5: 141). In the lower altitudes; occasional.

C. straminea Beadle. (C. *intricata* Sarg. Rhod. 3: 28). West Rutland, (Eggleson); Burlington, (A. W. Edson); Arlington, (W. H. Blanchard).

C. submollis Sarg. Bot. Gaz. 31: 1. Weybridge, (Brainerd).

C. succulenta Schrad. (C. *macracantha* Lodd.). Long-spine Thorn. Moist thickets and rich hillsides of the lower altitudes; common.

C. succulenta Schrad., var. **major** n. n. Eggleston. (*C. macracantha* Lodd., var. *succulenta* Eggleston. *Rhod.* 10: 82). With the type, in the Champlain Valley; rare.

C. succulenta Schrad., var. **rhombifolia** (Sarg.) n. n. Eggleston. (*C. rhombifolia* Sarg. *Rhod.* 5: 183). With type; frequent.

C. villipes Ashe. (*C. Holmesiana* Ashe). Common in the lower altitudes.

DALIBARDA

D. repens L. *Dalibarda*. Cool moist woods; frequent.

FILIPENDULA

F. rubra (Hill) Robinson. (*Ulmaria rubra* Hill). Queen of the Prairie. Roadside escape; occasional.

F. Ulmaria* (L.) Maxim. (*Ulmaria Ulmaria* Borkh.). Queen of the Meadow. Roadside escape; rare.

F. vulgaris* Moench. Dropwort. A well established roadside escape, Burlington, (Mrs. N. F. Flynn).

FRAGARIA. Strawberry

F. vesca* L. Dooryard, Middlebury, (Brainerd).

F. vesca L., var. **americana** Porter. (*F. americana* Britton). Wild or American Wood Strawberry. Woods; common.

F. virginiana Duchesne. Wild or Field Strawberry. Fields; common.

GEUM. Avens

G. canadense Jacq. (*G. album* Gmelin). White Avens. Borders of woods of the lower altitudes; common.

G. macrophyllum Willd. Moist open mountain woods; common above 1,500 feet altitude. Unknown on Willoughby Mt.

X G. pulchrum Fernald. (*G. macrophyllum* x *rivale*). Mendon, (Eggleson).

G. rivale L. Water or Purple Avens. Wet meadows and bogs; common.

G. strictum Ait. Yellow Avens. Moist meadows; common.

C. virginianum L. Rough Avens. Middlebury, (Brainerd); Burlington, (Mrs. N. F. Flynn); Rutland, (Kirk); Bennington, (Dutton).

PHYSOCARPUS. (OPULASTER). Nine-bark

P. opulifolius (L.) Maxim. Well established in the vicinity of "Retreat Park," Brattleboro, (Wheeler).

POTENTILLA. Cinquefoil. Five-finger

P. Anserina L. (*Argentina Anserina* [L.] Rydb.). Silver Weed. Common on the beaches of Lake Champlain and established where introduced in ballast along railroads.

P. Anserina L., var. **sericea** Hayne. *Rhod.* 11: 48. Burlington, (Mrs. N. F. Flynn); Sphagnum bog, foot of Mt. Killington, (Kirk).

P. argentea L. Silvery Cinquefoil. Dry barren fields; common.

P. arguta Pursh. (*Dry mocallis agri monioides* [Pursh] Rydb.). Tall Cinquefoil. Rocky hills of the lower altitudes; occasional.

P. canadensis L. Cinquefoil, Five-finger. Rocky hills and waste places of the lower altitudes.

P. canadensis L., var. **simplex** (Michx.) T. & G. (*P. simplex* Michx.). Cinquefoil, Five-finger. Waste places and dry sand; much more common than type on the eastern side of the state.

P. fruticosa L. (*Dasiphora fruticosa* [L.] Rydb.). Shrubby Cinquefoil. Swamps and moist cliffs. Smugglers' Notch; Lake Willoughby. Troublesome as a pasture weed in southwestern Vermont. Becoming locally established in Hartland, (Underwood).

P. monspeliensis L. Rough Cinquefoil. Dry soil; frequent.

P. monspeliensis L., var. **labradorica** (Lehm.) Fernald. Smugglers' Notch.

P. monspeliensis L., var. **norvegica** (L.) Rydb. Along railroad, Essex; pasture, Fairfield, (Blake).

P. palustris (L.) Scop. (*Comarum palustre* L.). Marsh Cinquefoil. Cool bogs; frequent. *Forma subsericea* occurs.

P. recta* L. Brattleboro, (Bates); Rutland, (Eggleston); Brandon, (Dutton); Burlington, (Hazen); Colchester, (Mrs. N. F. Flynn).

P. tridentata Ait. (*Sibbaldiopsis tridentata* [Soland.] Rydb.). Three-toothed or Mountain Cinquefoil. Summits of cliffs and mountains; occasional, e. g. Mt. Mansfield, Camel's Hump, Snake Mountain, Pownal, Mt. Horrid.

PRUNUS. Plum. Cherry

P. avium* L. Sweet Cherry, Mazzard Cherry. Manchester, (Mary A. Day).

P. cuneata Raf. Appalachian Cherry. Sand banks of lake shore, Burlington, (Pringle). Frequent on the sand plains in the vicinity of Burlington.

P. nigra Ait. Wild or Canada Plum. Woods and fence rows; frequent. Never native in eastern Vermont; (W. H. Blanchard).

P. pensylvanica L. f. Wild Red, Bird or Pin Cherry. Roadside thickets; common.

P. pumila L. Sand Cherry. Rocky or sandy shores of the Connecticut and Champlain Valleys; occasional.

P. serotina Ehrh. (*Padus virginiana* [L.] Mill.). Black Cherry. Woodlands; common.

P. virginiana L. (*Padus nana* [Du Roi] Roem.). Choke Cherry. Fencerows, woods and banks; common. Var. **leucocarpa** Wats. Lunenburg, (Annette Bell); Franklin, (Hazel Riley).

PYRUS

P. americana (Marsh.) DC. (*Sorbus americana* Marsh.). American Mountain Ash. Swamps and mountain woods; frequent.

P. arbutifolia (L.) L. f. (*Aronia arbutifolia* [L.] Ell.). Red Chokeberry. Swamp, Burlington, (Rand).

P. arbutifolia (L.) L. f., var. **atropurpurea** (Britton) Robinson. (*Aronia atropurpurea* Britton). Purple Chokeberry. Swamps; occasional.

P. Aucuparia* (L.) Ehrh. (*Sorbus Aucuparia* L.). European Mountain Ash. Peacham, (Blanchard); frequent about Burlington, (Jones); pastures, Middlebury, (Brainerd).

P. communis* L. Pear. A rare escape.

P. Malus* L. (*Malas Malus* [L.] Britton). Apple. Thickets and fence rows; common.

P. melanocarpa (Michx.) Willd. (*Aronia melanocarpa* [Michx.] Britton). Black Chokeberry. Moist woods and rocky uplands; common.

P. sitchensis (Roem.) Piper. (*Sorbus scopulina* Greene). Mt. Mansfield, Willoughby Mt., (Pringle); Killington Mt., (Kirk); Stratton, (Underwood).

ROSA. Rose

R. acicularis, Lindl., var. **Bourgeauiana** Crepin. Prickly Rose. Snake Mountain and Burlington, (Brainerd); Manchester, (Mary A. Day); Birdseye Mt., (Kirk); Arlington, (W. H. Blanchard).

R. blanda Ait. Smooth Rose. Roadsides and ledges; frequent.

R. carolina L. Swamp Rose. Borders of swamps and streams of the lower altitudes; common.

R. cinnamomea* L. Cinnamon Rose. Roadsides and about old gardens; frequent.

R. gallica* L. French Rose. Garden escape; rare.

R. humilis Marsh. (*R. virginiana* Mill.). Pasture Rose. Dry rocky slopes of the lower altitudes; common.

R. nitida Willd. Shining Rose. Bradford, (Alice E. Bacon).

R. rubiginosa* L. Sweetbrier. Old pastures; common.

R. spinosissima* L. Scotch Rose. Occasionally spreading from gardens.

R. virginiana Mill. Large Wild Rose. (*R. lucida* Ehrh.). North Powell, (Eggleson); West Haven, (Ross and Kirk).

RUBUS. Raspberry. Blackberry. Bramble

X R. abbrevians Blanchard. (*R. pergratus* x *setosus*). Occasional in uplands of Windham County.

R. allegheniensis Porter. (*R. nigrobaccus* Bailey). High-bush Blackberry. Dry thickets and recent clearings; common. *Forma albinus* (Bailey) Fernald. Pittsfield, (Mrs. Mary E. Eggleson).

R. arenicola Blanchard. (?A form derived from *R. procumbens* x *re-curvans*); Starr Farm, Burlington.

R. argutus Link. (*R. Andrewsianus* Blanchard; *R. floricomus* Blanchard). Champlain and Connecticut Valleys; rare.

R. Brainerdi Rydb. (*R. sativus* Gray's Man., ed. 7). Alluvial soil, Weybridge.

R. canadensis L. Common in the mountains.

X **R. cubitans** Blanchard. (*R. hispidus* x *procumbens*). Westminster, Stratton.

R. elegantulus Blanchard. Frequent in Windham County.

X **R. flavinanus** Blanchard. (*R. allegheniensis* x *elegantulus*). Found only in Stratton.

X **R. frondisentis** Blanchard. (*R. allegheniensis* x *setosus*). Townshend, Stratton, Berkshire.

X **R. Groutianus** Blanchard. (*R. elegantulus* x *setosus*). Wardsboro, Stratton.

R. heterophyllus Willd. (Apparently derived from *R. procumbens* x *recurvans*). Frequent along the Otter Creek in Middlebury and Weybridge; also at Starr Farm, Burlington.

R. hispidus L. Running Swamp Blackberry. Low woods and moist open fields; common.

R. idaeus L., var. **aculeatissimus** (C. A. Mey.) Regel & Tiling. (*R. stri-gosus* Michx.). Red Raspberry. Thickets and hills; common.

R. idaeus L., var. **anomalus** Arrhenius. (*R. Egglestonii* Blanchard). Cavendish, (Eggleston); Townshend, (Wheeler).

X **R. jaceus** Blanchard. (*R. procumbens* x *setosus*). Stratton, Wardsboro.

X **R. neglectus** Peck. (*R. idaeus*, var. *aculeatissimus* x *occidentalis*). Purple Raspberry. Ledgy fields and recent clearings; occasional.

R. occidentalis L. Black Raspberry, Thimbleberry. Fence rows and rich shady slopes; common.

R. odoratus L. Purple Flowering Raspberry. Moist shady hillsides; frequent.

R. pergratus Blanchard. Thickets and woodland borders; frequent.

X **R. permixtus** Blanchard. (*R. allegheniensis* x *hispidus*). Fence rows and borders of thickets; Westminster, Putney, Burlington.

X **R. plicatifolins** Blanchard. (*R. procumbens* x *recurvans*; ? *R. villosus* Ait.). Middlebury, Burlington, Essex.

R. procumbens Muhl. Dewberry, Running or Low Blackberry. Occasional both in typical and in several variant forms, e. g.: *R. geophilus* Blanchard and *R. Baileyanus* Britton.

R. pubescens Raf. (*R. triflorus* Richards.) Rhod. 11: 236. Dwarf or Running Raspberry. Moist cool soil; common.

R. recurvans Blanchard. Thickets and open fields; common.

R. setosus Bigelow. (*R. nigricans* Rydb.). Frequent at high altitudes; also at alt. 150 ft., Burlington.

X **R. trifrons** Blanchard. (*R. hispidus* x *setosus*). Marlboro, Stratton, Wardsboro, Ripton, Burlington; locally abundant.

R. vermontanus Blanchard. (*R. nigricans* Gray's Man., ed. 7). Frequent above 1,000 ft. altitude.

X **R. vermontanus**, var. **viridifolius** Blanchard. (*R. setosus* x *vermontanus*). Leicester, Rutland, Windham, Stratton, Wardsboro. Also the following intermediate forms, evidently the result of crossing, have been observed among the high-bush species:

R. allegheniensis x **canadensis**. Ripton, Stratton.

R. allegheniensis x pergratus. Wardsboro, Stratton.
R. allegheniensis x recurvans. Burlington.
R. canadensis x pergratus. Stratton, Wardsboro.
R. hispidus x recurvans. Fair Haven and West Haven; frequent.

SANGUISORBA. Burnet

S. canadensis L. Canadian Burnet. Brattleboro, (Frost); banks of the West, River, (Grout).
S. minor Scop. (*Poterium Sanguisorba* L.). Garden Burnet. Charlotte Center, (Pringle); Shelburne, (Mrs. N. F. Flynn).

SORBARIA. (SCHIZONOTUS)

S. sorbifolia* (L.) A. Br. (*Spiraea sorbifolia* L.). Ash-leaved Spiraea. Garden escape; frequent.

SPIRAEA

S. latifolia (Ait.) Borkh. Meadow-sweet. Pastures; common.
S. salicifolia L. (*Spiraea alba* Du Roi). Meadow-sweet. Swanton, (Blake); Alburg, (C. H. Knowlton).
S. tomentosa L. Steeple Bush, Hard Hack. Rocky pastures; common.

WALDSTEINIA

W. fragarioides (Michx.) Trattinick. Barren Strawberry. Wooded hill-sides and old pastures of the lower altitudes; common.

LEGUMINOSAE. PULSE FAMILY

AMORPHA. False Indigo

A. fruticosa L. Established at Retreat Park, Brattleboro, (Wheeler).
 AMPHICARPA. Hog Peanut
A. monoica (L.) Ell. (*Falcata comosa* [L.] Ktze.). Thickets; common.
A. Pitcheri T. & G. Along the river, Norwich, (E. F. Williams).

APIOS. Ground-nut. Wild Bean

A. tuberosa Moench. (*Glycine Apios* L.) Low moist ground; frequent.

ASTRAGALUS

A. alpinus L., var. **Brunetianus** Fernald. Rocky shores of Connecticut River; occasional.
A. Blakei Eggleston. Cliffs; Smugglers' Notch and Underhill Notch, Mt. Mansfield, type stations. Willoughby Mountain, (J. Blake); Mt. Hanley, West Rutland, (Kirk); rocky shores of Connecticut River, (Eggleston).
A. canadensis L. (*A. carolinianus* L.) Shores and islands of Lake Champlain; frequent.
A. Robbinsii (Oakes) Gray. On limestone rocks, near High Bridge, Winooski River, Burlington, (Robbins). This, the only station in Vermont, was destroyed in 1894 by the set back of the dam of the Vermont Electrical Power Company.

BAPTISIA. False Indigo

B. australis (L.) R. Br. Blue False Indigo. Royalton, (Ward).
B. tinctoria (L.) R. Br. Wild Indigo. Dry open fields; Vernon, (Grout); Pownal, (Churchill).

CASSIA. Senna

C. marilandica L. Wild Senna. Alluvial soil; "Orwell," (Dr. Hill); Bellows Falls, (Carey, W. H. Blanchard); Randolph, (Bates); Hartford, (Jesup); Brandon, (Dutton).
C. nictitans L. (Chamaecrista nictitans [L.] Moench). Wild Sensitive plant. Vernon, (Grout).

CICER

C. arietinum* L. Chick-pea. Railway embankment, Colchester, (Mrs. N. F. Flynn).

CORONILLA

C. varia* L. Crown Vetch. Garden escape; Randolph, (Bates).

CROTALARIA. Rattle-box

C. sagittalis L. Railroad banks; Vernon, (Grout).

DESMODIUM. (MEIBOMIA). Tick Trefoil

D. bracteosum (Michx.) DC. Dry thickets; West Rutland, (A. W. Driggs, Eggleston); North Pownal and Arlington, (Eggleston); South Pownal, (W. H. Blanchard).
D. canadense (L.) DC. Showy Tick Trefoil. Dry rich woods of the lower altitudes; common.
D. Dillenii Darl. Open woodlands of the lower altitudes; frequent.
D. grandiflorum (Walt.) DC. (D. acuminatum DC.). Rich woods of the lower altitudes; common.
D. nudiflorum (L.) DC. Dry woods of the lower altitudes; common.
D. paniculatum (L.) DC. Copses of the lower altitudes of western Vermont and north in the Connecticut Valley to Westminster; occasional.
D. rigidum (Ell.) DC. North Pownal, (Eggleston); Vernon, (W. H. Blanchard).
D. rotundifolium (Michx.) DC. (Meibomia Michauxii Vail). Dummers-ton, (Wild); Bellows Falls, (Blanchard); North Pownal, (Bates).

HEDYSARUM

H. boreale Nutt. Willoughby Mountain, (A. Wood); Smugglers' Notch, (Pringle).

LATYRUS. Everlasting Pea. Vetchling

L. latifolius* L. Everlasting or Perennial Pea. Along railroad, New-fane, (Jones).
L. maritimus (L.) Bigel. Beach Pea. Shores of Lake Champlain; occasional.

L. ochroleucus Hook. Headlands of northern Lake Champlain; occasional.

L. palustris L. Marsh Pea. Shores of Lake Champlain; frequent.

L. palustris L., var. **myrtifolius** (Muhl.) Gray. (*L. myrtifolius* Muhl.). "Vermont," (Torrey and Gray); "Island in Ferrisburgh," (Morong), in Walter Deane herbarium, Cambridge, Mass.

L. tuberosus* L. Vergennes, (Miss Ruth Fisher).

LESPEDEZA. Bush Clover

L. capitata Michx. Sandy soil of the lower altitudes; frequent.

L. frutescens (L.) Britton. Dry open places in the lower altitudes of southern Vermont; occasional.

L. hirta (L.) Hornem. Dry open woods of the lower altitudes of southern Vermont; occasional.

L. Nuttallii Darl. Vernon, (W. H. Blanchard).

L. Stuveli Nutt. Vernon, (W. H. Blanchard).

L. violacea (L.) Pers. Bush Clover. Dry woods. "Rockingham," (Carey); Gardiner's Island, (Pringle).

LUPINUS

L. perennis L. Wild Lupine. Common in sand plains along Lake Champlain.

MEDICAGO. Medick

M. arabica* Huds. Spotted Medick. Experiment Farm, Burlington, (Jones).

M. hispida* Gaertn. Bur Clover. Ludlow, (Miss Pollard); Hartland, (Ruggles); Burlington, (Jones).

M. lupulina* L. Black Medick, Nonesuch. Roadsides and fields; common.

M. sativa* L. Alfalfa, Lucerne. Often cultivated and persistent; occasional as an escape.

MELILOTUS. Sweet Clover

M. alba* Desr. White Melilot, White Sweet Clover. Waste or cultivated grounds; frequent.

M. officinalis* (L.) Lam. Yellow Melilot, Yellow Sweet Clover. Roadsides or waste places; occasional.

ONOBRYCHIS. Sainfoin

O. sativa* Lam. Experiment Farm, Burlington, (Jones).

ROBINIA. Locust

R. hispida L. Bristly Locust, Rose Acacia. Occasional as an escape. Well established, Jamaica, (Wheeler).

R. Pseudo-Acacia L. Common Locust, False Acacia. Frequent in cultivation and as an escape.

R. viscosa Vent. Clammy Locust. Occasional in cultivation and tending to spread.

TRIFOLIUM. Clover

T. agrarium* L. Yellow or Hop Clover. Sandy soil; frequent.

T. arvense* L. Rabbit-foot Clover. Old fields; frequent.

T. hybridum* L. Alsike Clover. Common.

T. incarnatum* L. Crimson or Italian Clover. Willoughby Lake, (Kennedy).

T. pratense* L. Red Clover. Common.

T. procumbens* L. Low Hop Clover. Burlington, (Mrs. N. F. Flynn); St. Albans, (Blewitt); along railroad, Rutland, (Kirk).

T. repens L. White Clover. Common.

VICIA. Vetch. Tare

V. angustifolia* Reichard. Common Vetch. Middlebury, (Brainerd); Hartland, (Underwood). Var. *segetalis** (Thuill.) Koch. Roadsides and along railroads; occasional.

V. Cracca L. Blue Vetch. Meadows and roadsides; frequent.

V. sativa* L. Spring Vetch. Occasional. White flowered form, Starr Farm, Burlington, (Mrs. N. F. Flynn).

V. tetrasperma* (L.) Moench. Slender Vetch. Meadows and pastures; occasional.

V. villosa* Roth. Hairy or Winter Vetch. Persisting in cultivated ground.

LINACEAE. FLAX FAMILY

LINUM. Flax

L. medium (Planch.) Britton. (*Cathartolinum medium* [Planch.] Small). Arlington, (W. H. Blanchard).

L. sulcatum Riddell. (*Cathartolinum sulcatum* [Riddell] Small). Rutland, (Dutton); Pownal, (W. H. Blanchard).

L. usitatissimum* L. Common Flax. Occasionally adventive, especially along railroads.

OXALIDACEAE. WOOD SORREL FAMILY

OXALIS. Wood Sorrel

O. Acetosella L. Common Wood Sorrel. Cool moist woods; common on mountain sides. Var. *subpurpurascens* DC. Stratton, (Wheeler); Manchester, (Grout).

O. corniculata L. (*Xanthoxalis corniculata* [L.] Small). Lady's Sorrel. Fields and gardens; common.

O. filipes Small. (*Xanthoxalis filipes* Small). Slender Yellow Wood Sorrel. Pownal, (Hazen).

O. repens Thunb. A weed in greenhouses; frequent.

O. stricta L. (*Xanthoxalis stricta* [L.] Small). Yellow Wood Sorrel. Burlington, (Hazen); Rutland, (Dutton).

GERANIACEAE. GERANIUM FAMILY

ERODIUM. Storksbill

E. Botrys* Bertol. On wool waste, Burlington, (Brainerd).
E. cicutarium* (L.) L'Her. Storksbill. Old gardens. Ludlow, (Miss Pollard); Burlington, (Mrs. A. J. Grout).
E. moschatum* (L.) L'Her. Musk Storksbill. On wool waste, Burlington, (Brainerd).

GERANIUM. Cranesbill

G. Bicknellii Britton. Dry rocky places; frequent in western Vermont and in the Connecticut Valley north to Norwich, (Egglesston).
G. maculatum L. Cranesbill. Open woods; frequent at low altitudes in western Vermont and in the Connecticut Valley north to Norwich, (Jesup); St. Johnsbury, (Inez A. Howe).
G. Robertianum L. (Robertiella Robertiana [L.] Hanks). Herb Robert. Rocky woods and ravines; common.

RUTACEAE. RUE FAMILY

RUTA. Rue

R. graveolens* L. Well established at Weybridge, (Brainerd).

ZANTHOXYLUM. Prickly Ash

Z. americanum Mill. Rocky woods and banks; occasional at low altitudes in western Vermont. "Norwich, Hartford," (Jesup); Sharon, (Jesup and Sargent); Peacham, (Blanchard). Perhaps introduced in eastern Vermont.

POLYGALACEAE. MILKWORT FAMILY

POLYGALA. Milkwort

P. paucifolia Willd. Fringed Polygala, Flowering Wintergreen. Common, especially in light soil at low altitudes.
P. polygama Walt. Milkwort. Dry sandy soil of western Vermont; occasional. North in the Connecticut Valley to Bellows Falls.
P. sanguinea L. (P. viridescens L.). Purple Milkwort. Moist sandy soil; Windsor, (Leland); Newfane, (Grout); Burlington, (Mrs. N. F. Flynn); Milton, (Jones); Rutland, (Kirk).
P. Senega L. Seneca Snake-root. Rocky soil, western Vermont; occasional.
P. verticillata L. Whorled Milkwort. Sandy soil; "Bellows Falls," (Tuckerman); Brattleboro, (Grout); Vernon, (B. L. Robinson); Pownal, (Egglesston); Townshend, (Wheeler).
P. verticillata L., var. *ambigua* (Nutt.) Wood. (P. *ambigua* Nutt.). Pownal, (Robbins); Vernon, (B. L. Robinson); Brattleboro, (Grout); Burlington, (Howe). Vernon to Bellows Falls, (W. H. Blanchard).

EUPHORBIACEAE. SPURGE FAMILY

ACALYPHA. Three-seeded Mercury

A. virginica L. Moist hollows in fields; frequent.

EUPHORBIA. Spurge

E. corollata L. (*Tithymalopsis corollata* [L.] Kl. & Garcke). Flowering Spurge. Sandy field, Burlington, (Mrs. N. F. Flynn); recently introduced from the west.

E. Cyparissias* L. (*Tithymalus Cyparissias* [L.] Hill). Cypress Spurge. Old cemeteries and roadsides; common.

E. hirsuta (Torr.) Wiegand. (*Chamaesyce Rafinesqui* [Greene] Small). Along railroad, Swanton, (Blake).

E. Helioscopia* L. (*Tithymalus Helioscopia* [L.] Hill). Wartweed. Waste places and gravelly shores; frequent in the Champlain Valley.

E. hirsuta (Torr.) Wiegand. (*Chamaesyce Rafinesqui* [Greene] Small). Sandy soil; common.

E. maculata L. (*Chamaesyce maculata* [L.] Small). Milk Purslane. Common in waste places.

E. Peplus* L. (*Tithymalus Peplus* [L.] Hill). Petty Spurge. Charlotte, (Pringle); Wallingford, (Brainerd); Westminster, (Blanchard).

E. platyphylla* L. (*Tithymalus platyphyllus* [L.] Hill). Shores and waste places; occasional.

E. Preslii Guss. (*Chamaesyce Preslii* [Guss.] Arthur). Waste places; occasional.

CALLITRICHACEAE. WATER STARWORT FAMILY

CALLITRICHE. Water Starwort

C. autumnalis L. Kelly's Bay, Alburgh, (Pringle).

C. palustris L. Cold or running water; frequent.

EMPETRACEAE. CROWBERRY FAMILY

EMPETRUM. Crowberry

E. nigrum L. Black Crowberry. Summits of Mt. Mansfield and Camel's Hump, (Robbins).

LIMNANTHACEAE. FALSE MERMAID FAMILY

FLOERKEA. False Mermaid

F. proserpinacoides Willd. Castleton, (Robbins); Shelburne, (Pringle).

ANACARDIACEAE. CASHEW FAMILY

RHUS. Sumach

R. canadensis Marsh. (*Schmaltzia crenata* [Mill.] Greene). Sweet-

scented Sumach. Dry rocky banks of western Vermont; occasional.

R. copallina L. Dwarf Sumach. Rocky hills of the lower altitudes; frequent. North in the Connecticut Valley to Fairlee, (Jesup).

R. glabra L. Smooth Sumach. Rocky soil; common in the lower Connecticut and the Hoosic Valleys. South Charlotte, (Horsford); Colchester, (Mrs. N. F. Flynn); Brandon, (Dutton); Rutland, (Kirk).

R. Toxicodendron L. Poison Ivy, Poison Oak. Banks and moist thickets; common. Var. **radicans** (L.) Torr. In woods; frequent.

R. typhina L. Staghorn Sumach. Hillsides; common. Forma **laciniata** (Wood.) Rehder. Rutland, (Eggleson); Hartland, (May Rogers).

R. Vernix L. (*Toxicodendron Vernix* [L.] Ktze.). Poison Sumach, Poison Dogwood. Occasional in swamps in the lower altitudes; rare in the southern Connecticut Valley.

AQUIFOLIACEAE. HOLLY FAMILY

ILEX. Holly

I. verticillata (L.) Gray. Black Alder, Winterberry. Thickets; common.

I. verticillata (L.) Gray, var. **padifolia** (Willd.) T. & G. Colchester, (Griffin).

I. verticillata (L.) Gray, var. **tenuifolia** (Torr.) Wats. (*I. bronxensis* Britton). Mouth of Winooski River, (Eggleson); Stratton, (Underwood); Dame Island, North Hero and Savage Island, Grand Isle, (Brainerd).

NEMOPANTHUS. (ILICIOIDES). Mountain Holly

N. mucronata (L.) Trel. Cold wet woods; frequent.

CELASTRACEAE. STAFF TREE FAMILY.

CELASTRUS. Staff Tree

C. scandens L. Waxwork, Climbing Bitter-sweet. Moist banks and thickets; common.

STAPHYLEACEAE. BLADDER NUT FAMILY

STAPHYLEA. Bladder Nut

S. trifolia L. American Bladder Nut. Moist woods and thickets; occasional at low altitudes in western Vermont, and north in the Connecticut Valley to Norwich, (Sargent).

ACERACEAE. MAPLE FAMILY

ACER. Maple

A. Negundo L. Box Elder. Abundant in some localities on the banks of the Winooski River from Montpelier to Burlington; bank of Connecticut River, Hartland, (Underwood).

- A. pennsylvanicum** L. Striped Maple, Moosewood. Rich woods; common.
- A. rubrum** L. Red or Swamp Maple. Moist woods and swamps; common.
- A. saccharinum** L. White or Silver Maple. Banks of rivers and lakes at low altitudes; frequent.
- A. saccharum** Marsh. Sugar or Rock Maple. Rich woods; common.
- A. saccharum** Marsh, var. **nigrum** (Michx. f.) Britton. Black Sugar Maple. Moist soil, Lake Champlain Valley; occasional. "Windsor," (Michaux); Arlington, (W. H. Blanchard); St. Johnsbury, (Bridget M. Rooney).
- A. spicatum** Lam. Mountain Maple. Cool ravines and mountain woodlands; common.

SAPINDACEAE. SOAPBERRY FAMILY

AESCRULUS. Horse-chestnut. Buckeye

- A. Hippocastanum*** L. Common Horse-chestnut. Commonly planted and occasionally spontaneous.

BALSAMINACEAE. TOUCH-ME-NOT FAMILY

IMPATIENS. Balsam. Jewelweed

- I. biflora** Walt. Spotted Touch-me-not. Moist shady places; common.
- I. pallida** Nutt. Pale Touch-me-not. Moist shady places, especially on mountain sides.

RHAMNACEAE. BUCKTHORN FAMILY

CEANOOTHUS. Red-root

- C. americanus** L. New Jersey Tea. Dry woodlands; common.
- C. ovatus** Desf. Sandy banks of Lake Champlain, Burlington.

RHAMNUS. Buckthorn

- R. alnifolia** L'Her. Dwarf Alder. Swamps; more frequent in western Vermont.
- R. cathartica*** L. Common Buckthorn. Common in cultivation and a frequent escape in woods and fields.

VITACEAE. VINE FAMILY

PSEDERA. (PARTHENOCISSUS). Woodbine. Virginia Creeper

- P. quinquefolia** (L.) Greene. Woodbine, American Ivy. Moist thickets; common.
- P. quinquefolia** (L.) Greene, var. **hirsuta** (Donn.) Rehder. Clinging closely to limestone ledges; Cornwall, (Brainerd); Burlington, (Jones); Rutland, (Kirk).
- P. vitaceae** (Knerr) Greene. Woodbine. Alluvial thickets; common.

VITIS. Grape

V. bicolor LeConte. Summer Grape. Dry gravelly soil at bases of cliffs of the lower altitudes; frequent.

V. labrusca L. Northern Fox Grape. Vernon, (Grout).

V. vulpina L. River-bank or Frost Grape. River banks; common.

TILIACEAE. LINDEN FAMILY

TILIA. Linden

T. americana L. Basswood. Woodlands; common.

MALVACEAE. MALLOW FAMILY

ABUTILON. Indian Mallow

A. Theophrasti* Medic. (A. Abutilon [L.] Rusby). Velvet Leaf. Roadsides and waste places; occasional.

HIBISCUS. Rose Mallow

H. Trionum* L. Bladder Ketmia. Occasional as a garden weed. Middlebury, (Brainerd); Peacham, (Blanchard); Panton and Burlington, (Jones); Putney, (W. H. Blanchard).

MALVA. Mallow

M. Alcea* L. European Mallow. Lyndon, (Congdon); Rutland, (Egleston); Burlington, (Mrs. N. F. Flynn); Westminster and Wardsboro, (W. H. Blanchard); Hartland, (Underwood).

M. moschata* L. Musk Mallow. Roadsides and waste places; an occasional escape.

M. rotundifolia* L. Common Mallow, Cheeses. Waste places; everywhere common.

M. sylvestris* L. High Mallow. Occurs sparingly in several places.

M. verticillata* L. A garden weed, increasingly troublesome. Middlebury, (Brainerd); Burlington, (Jones). Var. **crispa*** L. Curled Mallow. Knight's Island, (Brainerd).

HYPERICACEAE. ST. JOHN'S-WORT FAMILY

HYPERICUM. St. John's-wort

H. Aseyron L. Great St. John's-wort. River banks; occasional.

H. boreale (Britton) Bicknell. Wet soil; occasional.

H. canadense L. Moist soil; frequent.

H. ellipticum Hook. Pale St. John's-wort. Wet places of the lower altitudes; common.

H. gentianoides (L.) BSP. (*Sarothra gentianoides* L.). Orange Grass, Pine-weed. Brattleboro, (Frost, Grout); Dummerston, (Wheeler); Vernon, (W. H. Blanchard).

H. majus (Gray) Britton. (*H. canadense* L., var. Gray). Moist soil; occasional.

H. muticum L. Low ground; common.

H. perforatum* L. Common St. John's-wort. Fields and roadsides; common.

H. punctatum Lam. (*H. maculatum* Walt.). Damp places of the lower altitudes; frequent.

H. virginicum L. (*Triadenum virginicum* Raf.). Marsh St. John's-wort. Swamps; frequent.

CISTACEAE. ROCK ROSE FAMILY

HELIANTHEMUM. (*CROCANTHEMUM*). Rock Rose

H. canadense (L.) Michx. Frostweed. Sandy soil; occasional.

H. majus BSP. Frostweed. Sterile soil; frequent.

HUDSONIA

H. tomentosa Nutt., var. *intermedia* Peck. False Heather, Poverty Grass. Sandy beaches of Lake Champlain. Burlington Bay, Colchester Point, (Bigelow); Apple Tree Bay, (Mrs. N. F. Flynn).

LECHEA. Pinweed

L. intermedia Leggett. Dry sterile soil of the lower altitudes; occasional.

L. minor L. Vernon, (W. H. Blanchard).

L. villosa Ell. Hairy Pinweed. Vernon, (B. L. Robinson).

VIOLACEAE. VIOLET FAMILY

VIOLA. Violet. Heart's-ease

V. adunca Sm. Sandy and sterile soil; occasional.

V. affinis Le Conte. Moist thickets and borders of streams; frequent.

V. blanda Willd. Sweet White Violet. Rich woodlands; frequent.

V. canadensis L. Canada Violet. Woodlands; common.

V. conspersa Reichenb. Dog Violet. Moist or shady ground; common.

V. cucullata Ait. Marsh Blue Violet. Wet places and at high altitudes; frequent.

V. eriocarpa Schwein. (*V. scabriuscula* Schwein.). Torr. Bull. 38: 194. Smooth Yellow Violet. Moist open woods; frequent.

V. fimbriatula Sm. Sandy fields and dry hillsides; frequent.

V. incognita Brainerd. Sweet White Violet. Low moist woodlands and mountain slopes, often at high altitudes; common.

V. incognita, var. *Forbesii* Brainerd. Moist woods; frequent.

V. lanceolata L. Lance-leaved Violet. Moist pastures and pond borders; rare. Rutland, (Eggleston); Manchester, (Mary A. Day); Lily Pond, Vernon, (Grout); Williston, (Bates); Townshend, (Wheeler).

V. latiuscula Greene. Dry open woods; occasional.

V. nephrophylla Greene. Cold bogs and borders of streams and lakes; occasional.

V. pallens (Banks) Brainerd. Sweet White Violet. Wet soil near springs and cold brooks, often at high altitudes; frequent.

V. papilionacea Pursh. Moist groves and fence rows; occasional.

V. pubescens Ait. Downy Yellow Violet. Dry rich woods; frequent.

V. renifolia Gray. Arbor-vitae swamps and cold woods; occasional.

V. renifolia Gray, var. **Brainerdii** (Greene) Fernald. Occasional.

V. rostrata Pursh. Long-spurred Violet. Shady hillsides; frequent.

V. rotundifolia Michx. Round-leaved or Early Yellow Violet. Cold woods; occasional.

V. Selkirkii Pursh. Great-spurred Violet. Shady ravines and cold mountain woods; occasional.

V. septentrionalis Greene. Moist open woods; frequent.

V. sororia Willd. Woolly Blue Violet. Moist meadows and shady ledges; common.

V. tricolor* L. Pansy, Heart's-ease, Johnny-jump-up. Depauperate forms of the garden pansy sometimes occur spontaneously and are taken for this species. But the cultivated pansy is the result of frequent crossing of **V. tricolor** with allied species.

V. triloba Schwein. Dry rocky woodlands; Pownal, (Robbins); North Pownal, (Eggleson); Orwell, (Brainerd); West Haven, (Kirk).

Hybrids of *Viola* found in Vermont by Ezra Brainerd.:

V. affinis x cucullata. Rhod. 8: 49.

V. affinis x nephrophylla. Rhod. 8: 50.

V. affinis x septentrionalis. Rhod. 6: 219.

V. affinis x sororia. Rhod. 6: 221.

V. conspersa x rostrata. Ined. Middlebury.

V. cucullata x fimbriatula. Rhod. 6: 217.

V. cucullata x nephrophylla. Rhod. 8: 50.

V. cucullata x septentrionalis. Rhod. 6: 220.

V. cucullata x sororia. Rhod. 6: 222.

V. fimbriatula x latiuscula. Ined. Fort Ethan Allen, Colchester.

V. fimbriatula x septentrionalis. Rhod. 6: 215. Pl. 58.

V. fimbriatula x sororia. Rhod. 6: 218.

V. latiuscula x sororia. Ined. East Salisbury.

V. nephrophylla x sororia. Ined. Manchester.

V. septentrionalis x sororia. Rhod. 6: 221.

V. sororia x triloba. Bull. Torrey Bot. Club, 39: 82.

THYMELAEACEAE. MEZEREUM FAMILY

DAPHNE. Mezereum

D. Mezereum* L. Garden escape; Bradford, (Alice Bacon); Burlington, (Jones).

DIRCA. Leatherwood. Moosewood

D. palustris L. Wicopy. Moist open woods; frequent.

ELAEAGNACEAE. OLÉASTER FAMILY

SHEPHERDIA. (LEPARGYRAEA)

S. canadensis (L.) Nutt. Red sandstone cliffs, western Vermont; occasional.

LYTHRACEAE. LOOSESTRIFE FAMILY

DECODON. Swamp Loosestrife

D. verticillatus (L.) Ell. Water Willow. Swampy ground; occasional in western Vermont.

LYTHRUM. Loosestrife

L. alatum Pursh. Charlotte, (Pringle); Brandon, (Dutton); Burlington, (Mrs. N. F. Flynn).

L. Salicaria* L. Spiked Loosestrife. Wet meadows; Rutland, (Bigelow, Eggleston); Sharon, (Jesup, Sargent); Clarendon, (Grout); Wallingford, (Mrs. N. F. Flynn); West Haven, (Kirk).

MELASTOMACEAE. MELASTOMA FAMILY

RHEXIA. Deer-grass

R. virginica L. Meadow Beauty. "Brattleboro," (Frost); Lily Pond, Vernon, (Grout).

ONAGRACEAE. EVENING PRIMROSE FAMILY

CIRCAEA. Enchanter's Nightshade

C. alpina L. Deep woods; common.

C. intermedia Ehrh. Deep shade; occasional

C. luteola L. Woods; frequent.

EPILOBIUM. Willow-herb

E. adenocaulon Haussk. Moist places; frequent.

E. angustifolium L. (*Chamaenerion angustifolium* [L.] Scop.). Fireweed, Great Willow-herb. Common, especially in newly cleared lands.

E. coloratum Muhl. Wet places; occasional.

E. densum Raf. (*E. lineare* Muhl.?). Bogs; common.

E. molle Torr. (*E. strictum* Muhl.?). Cold bogs; occasional.

E. palustre L. Bogs of northern Vermont; rare. Franklin, (Underwood).

E. palustre L., var. **monticola** Haussk. (*E. lineare*, var. *oliganthum* Trel.). Bogs; Stratton, (Grout); Sunderland and Mendon, (Eggleston); Rutland, (Kirk).

LUDVIGIA. (ISNARDIA). False Loosestrife

L. palustris (L.) Ell. Water Purslane. Ditches and swamps of the lower altitudes; common.

OENOTHERA. Evening Primrose

O. biennis L. Common Evening Primrose. Dry soil; occasional.

O. cruciata Nutt. Gravelly soil; occasional.

O. laciniata Hill. (*Raimannia laciniata* [Hill] Rose). Fort Ethan Allen, (Grout); Burlington, (Mrs. N. F. Flynn).

O. muricata L. (*O. biennis* L. in part). Sandy soil of the lower altitudes; common.

O. Oakesiana Robbins. Adventive by roadsides, Burlington, (Hazen).

O. pratensis (Small) Robinson. (*Kneiffia pratensis* Small). Hartland, (Nancy Darling).

O. pumila L. (*Kneiffia pumila* [L.] Spach.). Fields; common.

O. serrulata Nutt. (*Meriolix serrulata* [Nutt.] Walp.). Along railroad, Burlington, (Mrs. N. F. Flynn).

HALORAGIDACEAE. WATER MILFOIL FAMILY

HIPPURIS. Mare's-tail

H. vulgaris L. Rare; in cold springy margin of Joe's Pond, West Danville, (Blanchard); Willoughby Lake, (Kennedy).

MYRIOPHYLLUM. Water Milfoil

M. alterniflorum DC. Bay south of North Hero, (Pringle and Brainard).

M. Farwellii Morong. Mountain ponds. Belden's Pond, Johnson; Townshend, (Grout); Spectacle Pond, Wallingford; North Pond, Brunswick; Little Averill Pond, (Eggleson).

M. humile (Raf.) Morong. Water Milfoil. West River, West Townshend, (Grout).

M. spicatum L. In deep water; common.

M. tenellum Bigel. Borders of ponds; occasional.

PROSERPINACA. Mermaid-weed

P. palustris L. Swamps of the lower altitudes of western Vermont; occasional. Fairlee Lake, (Jesup and Sargent).

ARALIACEAE. GINSENG FAMILY

ARALIA. Wild Sarsaparilla

A. hispida Vent. Bristly Sarsaparilla, Wild Elder. Rocky or sandy woodlands; frequent.

A. nudicaulis L. Wild Sarsaparilla. Moist woodlands; common.

A. racemosa L. Spikenard. Rich woodlands; frequent.

PANAX. Ginseng

P. quinquefolium L. Ginseng. Deciduous woods; becoming rare from much digging of the root.

P. trifolium L. Dwarf Ginseng, Ground-nut. Moist woods and thickets; common.

UMBELLIFERAE. PARSLEY FAMILY

ANGELICA. Angelica

A. atropurpurea L. Masterwort, Purple Angelica. Swamps and moist grounds; frequent.

CARUM. Caraway

C. Carvi* L. About dwellings and roadsides; frequent.

CICUTA. Water Hemlock

C. bulbifera L. Water Hemlock. Wet places; common.

C. maculata L. Spotted Cowbane, Musquash Root, Beaver Poison. Wet places; common. The root is very poisonous.

CONIOSELINUM. Hemlock Parsley

C. chinense (L.) BSP. Swamps and cold cliffs; occasional.

CONIUM. Poison Hemlock

C. maculatum* L. Waste places; occasional.

CRYPTOTAENIA. (DERINGA). Honewort

C. canadensis (L.) DC. Moist woods; common.

DAUCUS. Carrot

D. Carota* L. Wild Carrot. Old meadows; common.

HERACLEUM. Cow Parsnip. Masterwort

H. lanatum Michx. Cold moist ground; frequent.

HYDROCOTYLE. Water Pennywort

H. americana L. Wet places; common.

LEVISTICUM. Lovage

L. officinale* (L.) Koch. Occasionally adventive.

OSMORHIZA. (WASHINGTONIA). Sweet Cicely

O. Claytoni (Michx.) Clarke. Sweet Cicely. Rich woods; common.

O. longistylis (Torr.) DC. Sweet Cicely, Anise-root. Moist rich woods of the lower altitudes; occasional.

PASTINACA. Parsnip

P. sativa* L. Wild Parsnip. Roadsides and waste places; common.

SANICULA. Black Snakeroot. Sanicle

S. canadensis L. Shaded ledges of the lower altitudes of western Vermont; frequent.

S. gregaria Bicknell. Moist rich soil of the lower altitudes; frequent; Norwich, (Eggleston).

S. marilandica L. Moist woods; common.

S. trifoliata Bicknell. Rich woods of the lower altitudes of western Vermont; frequent.

SIUM. Water Parsnip

S. cicutaeifolium Schrank. Wet places of the lower altitudes; frequent.

TAENIDIA

T. integerrima (L.) Drude. Yellow Pimpernel. Ledges in the Champlain Valley; occasional.

ZIZIA

Z. aurea (L.) Koch. Golden Alexanders, Golden Meadow Parsnip. Moist meadows; common.

CORNACEAE. DOGWOOD FAMILY

CORNUS. Cornel. Dogwood

C. alternifolia L. f. Dogberry. Open woods; common.

C. Amomum Mill. (C. sericea L.). Kinnikinnik, Silky Cornel. Low woods and banks of the lower altitudes; common.

C. canadensis L. (Chamaepericlymenum canadense [L.] Asch. & Graebn.). Bunch-berry, Dwarf Cornel. Cold damp woods; common.

C. circinata L'Her. (C. rugosa Lam.). Round-leaved Cornel. Rocky woodlands; frequent.

C. florida L. (Cynoxylon floridum [L.] Raf.). Flowering Dogwood. Dry woods of southern Vermont; occasional.

C. paniculata L'Her. (C. femina Mill.; C. candidissima Marsh.). Paniced Dogwood. Rich thickets and banks; frequent.

C. stolonifera Michx. Red-osier Dogwood. Wet places; common.

NYSSA. Tupelo. Pepperidge. Sour Gum

N. sylvatica Marsh. Black Gum, Tupelo. Rich soil, generally swampy; occasional.

ERICACEAE. HEATH FAMILY

ANDROMEDA

A. glaucophylla Link. (A. Polifolia mostly of Am. auth., not L.). Bog Rosemary. Boggy margins of ponds; frequent.

ARCTOSTAPHYLOS. (UVA-URSI). Bearberry

A. Uva-ursi (L.) Spreng. Cliffs and bare hills of western Vermont and south in the Connecticut Valley to Fairlee Cliffs; occasional.

CHAMAEDAPHNE. Leather Leaf. Cassandra

C. calyculata (L.) Moench. Bogs; frequent.

CHIMAPHILA. Pipsissewa

C. maculata (L.) Pursh. Spotted Wintergreen. Dry woods; Newfane, (Grout).

C. umbellata (L.) Nutt. Prince's Pine, Pipsissewa. Dry woods; common.

CHIOGENES. Creeping Snowberry

C. hispidula (L.) T. & G. Moxie Plum, Capillaire. Peat bogs and mossy woods; frequent.

EPIGAEA. Ground Laurel. Trailing Arbutus

E. repens L. Mayflower. Sandy or rocky woodlands; common in certain areas.

GAULTHERIA. Aromatic Wintergreen

G. procumbens L. Teaberry, Checkerberry. Cool woods; common.

GAYLUSSACIA. Huckleberry

G. baccata (Wang.) K. Koch. Black Huckleberry. Sterile fields and thickets of western Vermont, and north in the Connecticut Valley to Hartford; common. **Forma glaucocarpa** (Robinson) Mackenzie. Blue Huckleberry. Westminster and Pownal, (W. H. Blanchard); Colchester and Burlington, (Blake).

KALMIA. Laurel

K. angustifolia L. Sheep Laurel, Lambkill, Wicky. Sterile fields and peat bogs; frequent.

K. latifolia L. Mountain Laurel, Calico Bush, Spoon-wood. Rocky hills; Rockingham, (Carey); Pownal, (Egglesston). Common along banks of West River between Brattleboro and Newfane and along the Connecticut River from Rockingham to Vernon, (W. H. Blanchard).

K. polifolia Wang. Pale Laurel. Peat bogs; occasional.

LEDUM. Labrador Tea

L. groenlandicum Oeder. Cold bogs; frequent.

LYONIA. (XOLISMA)

L. ligustrina (L.) DC. (*Andromeda ligustrina* Muhl.). Male Berry. Occasional in southern Vermont.

MONESES. One-flowered Pyrola

M. uniflora (L.) Gray. Deep cold woods; occasional.

MONOTROPA. Indian Pipe. Pinesap

M. Hypopitys L. (*Hypopitys lanuginosa* [Michx.] Nutt.). Pinesap, False Beech Drops. Rich dry woods; occasional.

M. uniflora L. Indian Pipe, Corpse Plant. Dark rich woods; common.

PTEROSPORA. Pine Drops

P. andromedea Nutt. Pine woods; rare.

PYROLA. Wintergreen. Shin Leaf

P. americana Sweet. (*P. rotundifolia* Gray's Man., ed. 6). Round-leaved Shin Leaf. Sandy woodlands of the lower altitudes; occasional.

P. asarifolia Michx. Alluvial woods; Norwich, (Eggleson); Westmore, (Kennedy); Clarendon and Rutland, (Kirk).

P. asarifolia Michx., var. *imernata* (Fisch.) Fernald. Sphagnum bogs; occasional.

P. chlorantha Sw. Dry woods; frequent.

P. elliptica Nutt. Shin Leaf. Rich woods; common.

P. minor L. Smugglers' Notch, (Pringle); Killington Mt., Sherburne, (Kirk); rare.

P. secunda L. Rich woods; frequent.

P. secunda L., var. *obtusata* Turcz. Peat bogs; Bristol Pond bog, (Pringle); Sutton and Newark, (E. Faxon); cedar swamp, Fairhaven, (Eggleson); Brandon, (Dutton).

RHODODENDRON

R. canadense (L.) BSP. Rhodora. Swamps and damp slopes of northern Vermont; occasional.

R. canescens (Michx.) G. Don. (*Azalea canescens* Michx.). Pinxter Flower. Woody banks and gravelly shores; occasional.

R. maximum L. Great Laurel. Rocky woods bordering Groton Pond, (Perkins); Peacham, (Blanchard); Martin's and Niggerhead Ponds, (Burbank); Lanesboro, (Miss M. Skinner); Harvey's Pond, West Barnet, (Marion Bole and Mrs. M. B. Hale).

VACCINIUM. Blueberry. Cranberry

V. atrococeum (Gray) Heller. Black High Blueberry. Swamps and pond borders of the lower altitudes of western Vermont; occasional.

V. caespitosum Michx. Dwarf Bilberry. Mt. Mansfield Chin, (Pringle); rocky shore West River, Newfane, (Grout); Townshend, (Wheeler); Jamaica, (Dobbin); Deerfield River, Wilmington, (W. H. Blanchard).

V. canadense Kalm. Sour-top or Velvet-leaf Blueberry. Moist thickets; common in the mountains. The market blueberry of Essex County.

V. corymbosum L. High or Swamp Blueberry. Swamps and low thickets. The abundant blueberry about northern Lake Champlain.

V. corymbosum L., var. *amoenum* (Ait.) Gray. Swamps; Monkton and Charlotte, (Pringle).

V. corymbosum L., var. *pallidum* (Ait.) Gray. Occasional.

V. macrocarpon Ait. (*Oxycoccus macrocarpon* [Ait.] Pursh.). Large or American Cranberry. Peat bogs; frequent.

V. Oxycoccus L. (*Oxycoccus Oxycoccus* [L.] MacM.). Small Cranberry. Cold peat bogs; frequent.

V. Oxycoccus L., var. *ovalifolium* Michx. (var. *intermedium* Gray). Rhod. 11:54. Occurs rarely. Colchester, (Oakes); Willoughby Lake, (Kennedy).

V. pensylvanicum Lam. (*V. angustifolium* Ait.). Low Sweet or Early Sweet Blueberry. Dry hills of the lower altitudes; common. The earliest market blueberry. Var. *angustifolium* (Ait.) Gray. Summit of Mt. Mansfield and Camel's Hump, (Robbins, Pringle).

V. pennsylvanicum Lam., var. **nigrum** Wood. (*V. nigrum* [Wood] Britton). Low Black Blueberry. Occasional with type.

V. pennsylvanicum Lam., var. **myrtilloides** (Michx.) Fernald. Rhod. 10: 147. East Wallingford, (Kent); Essex Junction, (Blake).

V. uliginosum L. Bog Bilberry. Summit of Mt. Mansfield and Camel's Hump, (Robbins, Pringle); Johnson, (Grout).

V. uliginosum L., var. **pubescens** Lange. Rhod. 15: 201. Mt. Mansfield, Jay Peak, Johnson, (Blake).

V. vacillans Kalm. Late Low Blueberry. Dry woodlands; common. Forming part of the later blueberries of the market.

V. vacillans Kalm., var. **erinitum** Fernald. Rhod. 13: 235. Rutland, the type station, and West Haven, (Kirk).

V. Vitis-Idaea L., var. **minus** Lodd. (*Vitis-Idaea Vitis-Idaea* [L.] Britton). On the summits of Mt. Mansfield and Camel's Hump, (Robbins); Willoughby Mt., (Kennedy).

DIAPENSIACEAE. DIAPENSIAS FAMILY

DIAPENSIAS

D. lapponica L. Mt. Mansfield Chin, (Pringle).

PRIMULACEAE. PRIMROSE FAMILY

ANAGALLIS. Pimpernel

A. arvensis* L. Common Pimpernel, Poor Man's Weather-glass. Lawns; Bradford, (Alice E. Bacon); Townshend, (W. H. Blanchard); Norwich, (H. B. Olds). Var. **caerulea*** (Schreb.) Ledeb. Bradford, (Alice E. Bacon); Middletown, (Carpenter).

LYSIMACHIA. Loosestrife

L. Nummularia* L. Moneywort, Yellow Myrtle. Lawns and damp ground; occasional.

X **L. producta** (Gray) Fernald. (*L. quadrifolia* x *terrestris*). Mouth of the Winooski River, (Eggleson and Jones); Jamaica, (Underwood).

L. quadrifolia L. Dry thickets of the lower altitudes; common.

L. terrestris (L.) BSP. Low ground; common.

L. thyrsiflora L. Tufted Loosestrife. Bogs and swamps; frequent.

PRIMULA. Primrose. Cowslip

P. mistassinica Michx. Willoughby Mountain, (A. Wood); Smugglers' Notch, (Morong).

SAMOLUS. Water Pimpernel. Brook-weed

S. floribundus HBK. Along sluggish brooks; Middlebury, (James, C. N. Brainerd); "Brattleboro," (Frost).

STEIRONEMA

S. ciliatum (L.) Raf. Moist thickets; common.

S. lanceolatum (Walt.) Gray. Low grounds along northern Lake Champlain; occasional.

TRIENTALIS. Chickweed Wintergreen

T. borealis Raf. (*T. americana* [Pers.] Pursh). *Rhod.* 11: 236. Star Flower. Moist woods and thickets; common.

OLEACEAE. OLIVE FAMILY

FRAXINUS. Ash

F. americana L. White Ash. Rich woods; common.

F. nigra Marsh. Black Ash. Swamps and wet woods; common.

F. pennsylvanica Marsh. Red Ash. Low grounds; common along Lake Champlain and its tributaries. Newport, (C. H. Knowlton).

F. pennsylvanica Marsh., var. **lanceolata** (Borkh.) Sarg. Green Ash. Occasional along shores of Lake Champlain. Walpole, N. H., (Fernald).

SYRINGA. Lilac

S. vulgaris* L. Common Lilac. An escape from cultivation.

GENTIANACEAE. GENTIAN FAMILY

BARTONIA

B. virginica (L.) BSP. "Rockingham," (Carey); Higbee swamp, South Burlington, (Jones); Colchester, (Mrs. N. F. Flynn).

GENTIANA. Gentian

G. Amarella L., var. **acuta** (Michx.) Herder. (*G. acuta* Michx.). Smugglers' Notch, (Pringle).

G. Andrewsii Griseb. (*Dasystephana Andrewsii* [Griseb.] Small). Closed Gentian. Moist grounds of the lower altitudes; frequent.

G. erinata Froel. Fringed Gentian. Moist ground; frequent in the southern part of the State.

G. linearis Froel. (*Dasystephana linearis* [Froel.] Britton). Bogs and meadows in the mountains; occasional.

G. quinquefolia L. Moist hills; occasional.

HALENIA. Spurred Gentian

H. deflexa (Sm.) Griseb. Banks of Lewis Creek, Charlotte, (Horsford and Pringle); St. Johnsbury, (Inez A. Howe).

MENYANTHES. Buckbean

M. trifoliata L. Bog Bean, Marsh Trefoil. Sphagnum bogs; occasional.

NYMPHOIDES. (LIMNANTHEMUM). Floating Heart

N. lacunosum (Vent.) Fernald. Shallow water; Spectacle Pond, East Wallingford, (Kent); Springfield, (Egglesston); common in Windham County, (Grout).

APOCYNACEAE. DOGBANE FAMILY

APOCYNUM. Dogbane. Indian Hemp

A. androsaemifolium L. Spreading Dogbane. Thickets and fields; common.

A. cannabinum L. Indian Hemp. Moist banks; occasional.

A. medium Greene. Willoughby Lake, (Kennedy); rocky shore of Winooski River near High Bridge, Essex, (Blake).

VINCA. Periwinkle

V. minor* L. Common Periwinkle, Blue Myrtle. Persisting in neglected dooryards.

ASCLEPIADACEAE. MILKWEED FAMILY

ASCLEPIAS. Milkweed. Silkweed

A. amplexicaulis Sm. (A. obtusifolia Michx.). Sandy soil; frequent about Burlington.

A. incarnata L. Swamp Milkweed. Marshes of the lower altitudes; common.

A. incarnata L., var. **pulchra** (Ehrh.) Pers. (A. pulchra Ehrh.). Swamp Milkweed. Dummerston, (Addie L. Reed); Jamaica, (Wheeler).

A. phytolaccoides Pursh. (A. exaltata Muhl.). Poke Milkweed. Moist copses of the lower altitudes; occasional.

A. quadrifolia Jacq. Rocky woods of the lower altitudes; occasional.

A. syriaca L. Common Milkweed or Silkweed. Rich grounds; common.

A. tuberosa L. Butterfly Weed. Dry fields; "Pownal," (Robbins); Bellows Falls, (Carey, W. H. Blanchard); Vernon, (Grout); Manchester, (Mary A. Day); Brattleboro, (Addie L. Reed).

CYNANCHUM

C. nigrum* (L.) Pers. Black Swallow-wort. Brattleboro, (Frost); Windsor, (Leland); Hartland, (Underwood).

CONVOLVULACEAE. CONVOLVULUS FAMILY

CONVOLVULUS. Bindweed

C. arvensis* L. Field Bindweed. A garden weed; Woodstock, (Dana); Burlington, (Jones); Rutland, (Kirk); becoming common.

C. japonicus* Thunb. California Rose. The double-flowered form is an occasional escape from cultivation.

C. sepium L. Hedge Bindweed. Moist thickets; common.

C. sepium L., var. *pubescens* (Gray) Fernald. Along gravelly shores of Lake Champlain; occasional.

C. spithameus L. Dry sandy plains; common about Burlington. Norwich and Rutland, (Egglesston).

CUSCUTA. Dodder. Love Vine

C. Epithymum* Murr. In clover fields; threatening to become troublesome.

C. Gronovii Willd. Moist thickets of the lower altitudes; common.

IPOMOEA. (QUAMOCLIT). Morning Glory

I. coccinea L., var. *hederifolia** (L.) Gray. In garden, Burlington, (Mrs. Zottman).

I. purpurea (L.) Roth. Common Morning Glory. Frequently spontaneous in gardens and waste places.

POLEMONIACEAE. POLEMONIUM FAMILY

GILIA. (COLLOMIA)

G. Huearis (Nutt.) Gray. Railroad yards, Burlington, (Mrs. N. F. Flynn).

PHLOX

P. divaricata L. Blue Phlox. Sheldon, (Underwood).

P. maculata L. Wild Sweet William. Hancock, (Dutton).

P. paniculata L. Garden Phlox. Garden escape; common.

P. stolonifera Sims. Middletown Springs, (Carpenter); Stowe, (Mrs. Carrie E. Straw).

P. subulata L. Ground or Moss Pink. Old cemeteries; St. Johnsbury, (Isabella M. Paddock); Putney and Stratton, (W. H. Blanchard); on rocky hill, Colchester, (Griffin).

POLEMONIUM. Greek Valerian

P. Van-Bruntiae Britton. Abby Pond, Ripton, (Brainerd); Cavendish, (Underwood).

HYDROPHYLACEAE. WATERLEAF FAMILY

HYDROPHYLLUM. Waterleaf

H. canadense L. Damp rich woods; Pownal, (Churchill).

H. virginianum L. Rich woods of the lower altitudes; common.

BORAGINACEAE. BORAGE FAMILY

CYNOGLOSSUM. Hound's Tongue

C. boreale Fernald. Wild Comfrey. Moist banks of the lower altitudes; occasional. Peacham, (Blanchard); Fairlee, (Sargent and Egglesston).

*C. officinale** L. Common Hound's-tongue. Pastures; frequent.

ECHIUM. Viper's Bugloss

*E. vulgare** L. Blueweed, Blue Devil. Pastures and moist soil. Becoming increasingly troublesome as a weed, particularly in Rutland County and southward.

LAPPULA. Stickseed

*L. echinata** Gilibert. (*Lappula Lappula* [L.] Karst.). Ledges and gravelly shores of Lake Champlain; frequent.

L. virginiana (L.) Greene. Beggar's Lice. Borders of woods in the lower altitudes; frequent.

LITHOSPERMUM. Gromwell. Puccoon

L. arvense L. Common Gromwell. Old fields and roadsides of western Vermont; occasional.

L. latifolium Michx. Colchester, (Griffin).

*L. officinale** L. Common Gromwell. Dry pastures; common.

MERTENSIA. Lungwort

M. virginica (L.) Link. Virginia Cowslip, Bluebells. Garden escape, Burlington, (Gifford).

MYOSOTIS. Forget-me-not. Scorpion-grass

M. arvensis (L.) Hill. Sharon, (Dr. Baxter); Townshend, (W. H. Blanchard).

M. laxa Lehm. Wild Forget-me-not. Cold brooks; Peacham, (Blanchard); abundant in White River Valley, (Eggleston).

M. scorpioides L. (*M. palustris* Hill). True Forget-me-not. Frequently naturalized along cold brooks.

M. virginica (L.) BSP. (*M. verna* Nutt.). Dry banks and ledges; occasional.

SYMPHYTUM. Comfrey

*S. aspernum** Donn. Rough Comfrey. Dummerston, Vernon, (W. H. Blanchard); Stockbridge, Rutland, (Eggleston).

*S. officinale** L. Common Comfrey. Moist places; occasional.

VERBENACEÆ. VERVAIN FAMILY

VERBENA. Vervain

V. angustifolia Michx. Arlington, (W. H. Blanchard).

V. hastata L. Blue Vervain. Roadsides of the lower altitudes; common.

V. urticaefolia L. White Vervain. Roadsides of the lower altitudes; common.

X *V. hastata x urticaefolia*. Pownal, (W. H. Blanchard); Rutland, (Kirk).

LABIATAE. MINT FAMILY

AGASTACHE. (LOPHANTHUS). Giant Hyssop

A. nepetoides (L.) Ktze. Thickets and along fences; Middlebury, (James, Brainerd); Pownal, Bennington, Arlington, (Robbins); Stowe, (Mrs. Carrie E. Straw).

A. serophulariaefolia (Willd.) Ktze. Thickets and fencerows of western Vermont; occasional. South Newbury, (Jesup and Sargent). Var. *mollis* (Fernald) Heller. Manchester, (Mary A. Day).

AJUGA. Bugle Weed

A. genevensis* L. In lawn, Burlington, (Jones).

BLEPHILIA

B. ciliata (L.) Raf. Wood Mint. Dry open places; East Dorset, (S. Grout); Manchester, (Mary A. Day).

B. hirsuta (Pursh.) Benth. Wood Mint. Moist shady places in the mountains; occasional. Var. *glabrata* Fernald. Dry soil; Manchester, (Mary A. Day).

COLLINSONIA. Horse Balm

C. canadensis L. Rich-weed, Stone-root. Rich moist woods of southern and central Vermont; occasional west of the mountains. (Middlebury, (James); Arlington, (Robbins); Proctor, (Brainerd)).

GALEOPSIS. Hemp Nettle

G. Tetrahit* L. Common Hemp Nettle. Waste places; common.

HEDEOMA. Mock Pennyroyal

H. hispida Pursh. Burlington, (Hollister); Rutland, (Kirk); Colchester, (Griffin); Essex, (Blake).

H. pulegioides (L.) Pers. American Pennyroyal. Dry fields; common.

HYSSOPUS. Hyssop

H. officinalis* L. Roadsides and fields; occasional.

ISANTHUS. False Pennyroyal

I. brachiatus (L.) BSP. Dry sterile fields of southern and central Vermont, west of the mountains; rare.

LAMIUM. Dead Nettle

L. amplexicaule* L. Henbit. Garden weed; Bristol, (Pringle); Rutland, (Eggleson); South Burlington, (Mrs. N. F. Flynn); Westminster, (W. H. Blanchard).

L. maculatum* L. Spotted Dead Nettle, Flowering Sage. Garden escape; occasional. The white-flowered form occurs with the type, Essex, (Mrs. N. F. Flynn).

LEONURUS. Motherwort

L. Cardiae* L. Common Motherwort. Waste places; common.

LYCOPUS. Water Horehound

L. americanus Muhl. Moist soil; common.

L. uniflorus Michx. Bugle Weed. Shady moist places; common.

MARRUBIUM. Horehound

M. vulgare* L. Common Horehound. Garden escape; Peacham, (Blanchard); Brandon, (Dutton).

MENTHA. Mint

M. arvensis L. Field Mint. Willoughby Lake, (Kennedy); Hartland, (Underwood).

M. arvensis L., var. **canadensis** (L.) Briquet. Wild Mint. Wet places; common. Var. **lanata** Piper. Rutland, (Kirk).

M. arvensis L., var. **glabrata** (Benth.) Fernald. Hartland, (Underwood).

M. Cardiaca* Gerarde. Garden escape, Rutland, (Kirk).

M. gentilis* L. Spotted or Whorled Mint. Garden escape, Rochester and Rutland, (Egglesston); Johnson, (Grout); Burlington, (Mrs. N. F. Flynn); Stowe, (Mrs. Carrie E. Straw).

M. piperita* L. Peppermint. Along brooks; frequent.

M. spicata* L. (**M. viridis** L.) Spearmint. Moist places; common.

MONARDA. Horse Mint

M. didyma L. Oswego Tea, Bee Balm. Moist woods; occasional.

M. fistulosa L., var. **rubra** Gray. Wild Bergamot. Garden escape, Stowe, Bennington, (Egglesston); Rutland, (Kirk).

M. mollis L. Downy Bergamot. Dry open woods; occasional.

M. punctata L. Horse Mint. Colchester and Burlington, (Mrs. N. F. Flynn); Essex, (Jones); St. Johnsbury and Vershire, (Inez A. Howe).

NEPETA. Cat Mint

N. Cataria* L. Catnip. Dry pastures; common.

N. hederacea* (L.) Trevisan. (*Glecoma hederacea* L.). Gill-over-the-Ground, Ground Ivy. Moist shady places; common.

ORIGANUM. Wild Marjoram

O. vulgare* L. Rocky soil; occasional.

PHYSOSTEGIA. (DRACOCEPHALUM). False Dragon Head

P. virginiana (L.) Benth. Lion's Heart. Gravelly shores of Lake Champlain; occasional.

PRUNELLA. (BRUNELLA). Self Heal

P. vulgaris L. Heal-all, Carpenter-weed. Woods and fields; common. Plants with white flowers occur occasionally.

PYCNANTHEMUM. (KOELLIA). Mountain Mint. Basil

P. flexuosum (Walt.) BSP. Dry fields of western Vermont; occasional. Hartland, (J. P. Webster).

P. incanum (L.) Michx. Rocky woods; Pownal, (Robbins); Brattleboro and North Pownal, (Eggleson).

P. muticum (Michx.) Pers. Fields; Cavendish, (Macrae); Royalton, (Ward); South Shaftsbury, (Eggleson).

P. verticillatum (Michx.) Pers. Moist fields; occasional in western Vermont, common about Rutland, (Eggleson).

P. virginianum (L.) Durand & Jackson. Dry woods; occasional in western Vermont and in the Connecticut Valley north to Bellows Falls, (Carey, W. H. Blanchard).

SALVIA. Sage

S. verticillata* L. Introduced in meadow, Dorset, (Mrs. Terry).
-SATUREJA. (CLINOPODIUM). Savory. Calamint

S. Acinos* (L.) Scheele. Burlington, (Mrs. N. F. Flynn); Townshend, (W. H. Blanchard); Rochester, (Dutton).

S. hortensis* L. Summer Savory. Gravelly bank, outlet of Dorset Pond, (Grout); garden escape, Burlington, (Mrs. Jane Walker).

S. vulgaris (L.) Fritsch. Basil. Dry woods and thickets; frequent.

SCUTELLARIA. Skullcap

S. galericulata L. Marsh Skulcap. Wet shady places; common.

S. lateriflora L. Mad-dog Skulcap. Wet shady places; common.

S. parvula Michx. Dry banks and headlands of Lake Champlain; local.

STACHYS. Hedge Nettle

S. palustris L. Woundwort. Meadow, East Wallingford, (E. C. Kent).

S. tenuifolia Willd., var. **aspera** (Michx.) Fernald. Moist ground of the lower altitudes and north in the Connecticut Valley to Norwich; occasional.

TEUCRIUM. Germander

T. occidentale Gray. Rutland, (Eggleson).

T. occidentale Gray, var. **boreale** (Bicknell) Fernald. (T. boreale Bicknell). Rocky shores of Lake Champlain and the Connecticut River; occasional.

THYMUS. Thyme

T. Serpyllum* L. Creeping Thyme. Peacham, (Blanchard); West Berkshire, (Wild, Mrs. Frances Jolley); South Hero, (Rugg).

TRICHOSTEMA. Blue Curls.

T. dichotomum L. Bastard Pennyroyal. Sandy fields of the lower altitudes; occasional. North in the Connecticut Valley to Norwich.

SOLANACEAE. NIGHTSHADE FAMILY

DATURA. Jamestown or Jimson Weed. Thorn Apple

D. Stramonium* L. Stramonium, Thorn Apple. Occasional in waste places.

D. Tatula* L. Purple Stramonium or Thorn Apple. Rare.

HYOSCYAMUS. Henbane

H. niger* L. Black Henbane. Roadsides; "Panton," (Burge); "Mt. Independence," (Dr. Hill); Shoreham, (Brainerd).

LYCIUM. Matrimony Vine

L. halimifolium* Mill. Common Matrimony Vine. Waste place, Burlington, (Mrs. N. F. Flynn).

NICANDRA. (PHYSALODES). Apple of Peru

N. Physalodes* (L.) Pers. Thetford and Peacham, (Blanchard); Shoreham and Woodstock, (Brainerd); Rutland, (Kirk); Burlington, (F. A. Ross).

PHYSALIS. Ground Cherry

P. grandiflora Hook. (*Leucophysalis grandiflora* [Hook] Rydberg). Providence Island, (Perkins); Stave Island, (Mrs. N. F. Flynn); South Hero, (J. H. Stickney).

P. heterophylla Nees. Manchester, (Mary A. Day); Willoughby Lake, (Kennedy); Hartland, (P. W. Whiting); Colchester, (Mrs. Jane Walker); St. Johnsbury, (Bridget M. Rooney). Var. *ambigua* (Gray) Rydberg. Sandy soil and gardens of the lower altitudes; occasional.

P. peruviana* L. Bank of Winooski River, Burlington, (Jones).

P. pruinosa L. Strawberry Tomato. Rutland, (Eggleston); Pittsford, (Grace A. Woolson); Middlebury, (Brainerd).

P. subglabrata Mackenzie & Bush. Colchester, (Mrs. Jane Walker).

P. virginiana Mill. Highgate, (Jesup); St. Johnsbury, (Mrs. M. H. Buckham).

SOLANUM. Nightshade

S. carolinense L. Horse Nettle. Woodstock, (Wild); Westminster, (W. H. Blanchard).

S. Dulcamara* L. Bittersweet, Woody Night-shade. Moist thickets of the lower altitudes; frequent.

S. nigrum L. Common Night-shade. Moist shaded ground of the lower altitudes; frequent.

S. rostratum* Dunal. Sand Bur, Buffalo Bur. Barre, (Eunice D. Smith); Burlington, (Helyer).

SCROPHULARIACEAE. FIGWORT FAMILY

CASTILLEJA. Painted Cup

C. pallida (L.) Spreng., var. *septentrionalis* (Lindl.) Gray. (*C. acuminata* (Pursh.) Spreng.). Mt. Mansfield, (Tuckerman and Macrae); Smugglers' Notch, (Pringle).

CHELONE. Turtlehead. Snakehead

C. glabra L. Balmony. Moist soil; common.

GERARDIA. Gerardia

G. flava L. (*Dasystoma flava* [L.] Wood). Downy False Foxglove. Bellows Falls, (Carey, W. H. Blanchard); Pownal, (Andrews); West Rutland, (Eggleston); Putney, Westminster, (W. H. Blanchard); Townshend, (Wheeler).

G. paupercula (Gray) Britton. (*Agalinis paupercula* [Gray] Britton). Knight's and Butler's Islands, (Brainerd); Highgate, (Wild); Colchester, (Mrs. N. F. Flynn, Griffin); Swanton, (Blake).

G. pedicularia L. (*Dasystoma pedicularia* [L.] Benth.). Dry copses of southern and central Vermont; occasional.

G. tenuifolia Vahl. (*Agalinis tenuifolia* [Vahl.] Raf.). Slender Gerardia. Dry open woods of the lower altitudes. North in the Connecticut Valley to Hartland and in western Vermont to Swanton.

G. virginica (L.) BSP. (*Dasystoma virginica* [L.] Britton). Smooth False Foxglove. Dry open woods of the lower altitudes of southern and central Vermont.

GRATIOLA. Hedge Hyssop

G. aurea Muhl. Sandy shores of Lake Champlain; rare. Rochester, (Dutton); Lily Pond, Vernon, (W. H. Blanchard); Hartland, (Underwood).

G. virginiana L. Wet shores and ditches of the lower altitudes of western Vermont; occasional.

ILYSANTHES. False Pimpernel

I. dubia (L.) Barnhart. Wet places; occasional.

LINARIA. Toadflax

L. canadensis (L.) Dumont. Blue Toadflax. Dry soil; Bellows Falls, (Carey, W. H. Blanchard). Vernon, (Grout); Westminster, South Vernon, (W. H. Blanchard); Jamaica, (Wheeler).

L. minor* (L.) Desf. (*Chaenorrhinum minus* [L.] Lange). Along railroad track, West Rutland, (Kirk); Sheldon, (Underwood); Swanton, (Blake).

L. vulgaris* Hill. (*L. Linaria* [L.] Karst.). Ramsted, Butter and Eggs. Fields; common.

MELAMPYRUM. Cow Wheat

M. lineare Lam. Dry woodlands of the lower altitudes; frequent.

MIMULUS. Monkey Flower

M. Langsdorffii* Donn. Yellow Monkey Flower. Reading, (Whiting).

M. moschatus Dougl. Musk-plant. Wet places; Wallingford, (Kent); Wardsboro, (Howe); Weston, (Mrs. N. F. Flynn); Jay, (Underwood).

M. ringens L. Wet places; common.

PEDICULARIS. Lousewort

P. canadensis L. Common Lousewort, Wood Betony. Thickets of the lower altitudes; common.

PENTSTEMON. Beard-tongue

P. hirsutus (L.) Willd. Rocky hills; frequent in western Vermont.

P. laevigatus Ait., var. **Digitalis** (Sweet) Gray. (*P. Digitalis* [Sweet] Nutt.). Fields; occasional.

RHINANTHUS. Yellow Rattle

R. Crista-galli L. Field, Bennington, (Mrs. Terry).

SCROPHULARIA. Figwort

S. leporella Bicknell. Meadows and fence rows of the lower altitudes; occasional.

S. marilandica L. Figwort. Waste places of western Vermont; occasional.

VERBASCUM. Mullein

V. Blattaria* L. Moth Mullein. Clay or rocky pastures and roadsides; occasional. Var. **albiflorum*** Ktze. Occasional with the type.

V. Thapsus* L. Common Mullein. Fields; common.

VERONICA. Speedwell

V. americana Schwein. American Brooklime. Wet ground; common.

V. Anagallis-aquatica L. Water Speedwell. "Middlebury," (Burge); Tinmouth Creek, Tinmouth, (Eggleson).

V. arvensis* L. Corn Speedwell. Fields; occasional.

V. Chamaedrys* L. Bird's-eye. Glebe Mountain, Windham, (W. H. Blanchard).

V. humifusa Dickson. Peacham, (F. Blanchard); Willoughby Lake, (Kennedy); St. Johnsbury, (Isabelle M. Paddock).

V. officinalis L. Common Speedwell. Dry fields and thickets of the lower altitudes; common.

V. peregrina L. Neckweed, Purslane Speedwell. Gardens and waste places; frequent.

V. scutellata L. Marsh Speedwell. Wet grounds and marshes; common. North in the Connecticut Valley to Hanover, N. H.

V. serpyllifolia L. Thyme-leaved Speedwell. Roadsides and fields of the lower altitudes; common.

V. Teucrium* L. East Wallingford, (E. C. Kent).

V. Tournefortii* C. C. Gmel. (*V. Buxbaumii* Tenore). Waste ground; occasional.

LENTIBULARIACEAE. BLADDERWORT FAMILY

PINGUICULA. Butterwort

P. vulgaris L. Alpine cliffs, Smugglers' Notch, (Pringle).

UTRICULARIA. Bladderwort

U. clandestina Nutt. (*U. geminiscapa* Benj.). Willoughby Lake, (Kennedy).

U. cornuta Michx. (*Stomoisia cornuta* [Michx.] Raf.). Bogs; frequent.

U. gibba L. Rocky Pond, Rutland, (Ross).

U. inflata Walt. In still waters of southern Vermont; occasional.

U. intermedia Hayne. Shallow pools; occasional.

U. resupinata B. D. Greene. (*Lecticula resupinata* [B. D. Greene] Barnhart). Fairlee Lake, (Jesup and Sargent); Townshend, (Wheeler).

U. vulgaris L., var. *americana* Gray. (*U. macrorhiza* Le Conte). Greater Bladderwort. Ponds and slow streams; common.

OROBANCHACEAE. BROOM-RAPE FAMILY

CONOPHOLIS. Squaw-root. Cancer-root

C. americana (L. f.) Wallr. Woods on White Creek, (Chandler); "Rock Point, Burlington," (Macrae); West Rutland, (H. M. Denslow); Snake Mountain, (Brainerd); Leicester, (Dutton); Townshend, (Wheeler).

EPIFAGUS. Beech-drops. Cancer-root

E. virginiana (L.) Bart. (*Leptamnium virginianum* [L.] Raf.). Beech-drops. Under beech trees; common.

OROBANCHE. (THALESIA). Broom-rape

O. uniflora L. One-flowered Cancer-root. Dry woodlands; occasional.

ACANTHACEAE. ACANTHUS FAMILY

DIANTHERA. Water Willow

D. americana L. Collected by Dr. Paddock, in 1819, in water at Ferrisburgh; specimen now in University of Vermont herbarium. No later botanist has found it in Vermont.

PHRYMACEAE. LOPSEED FAMILY

PHRYMA. Lopseed

P. Leptostachya L. Moist open woods of the lower altitudes; occasional.

PLANTAGINACEAE. PLANTAIN FAMILY

LITTORELLA

L. uniflora (L.) Asch. Gravelly shores; Kelley's Bay, Alburgh, (Pringle); Spectacle Pond, East Wallingford, (Kent); Notch Pond, Ferdinand, (Eggleson).

PLANTAGO. Plantain

P. aristata Michx. Occasionally introduced with grass seed.

P. lanceolata* L. English Plantain, Rib Grass, Ripple Grass. Grass land; common.

P. major L. Common Plantain. Waysides; common.

P. Rugelii Dcne. Plantain. With the preceding species; common.

RUBIACEAE. MADDER FAMILY

CEPHALANTHUS. Buttonbush

C. occidentalis L. Swamps of the lower altitudes; frequent. North in the Connecticut Valley to Fairlee.

GALIUM. Bedstraw. Cleavers

G. Aparine L. Cleavers, Goose Grass. Shaded ground of the lower altitudes; frequent. In the Connecticut Valley north to Norwich.

G. asprellum Michx. Rough Bedstraw. Alluvial ground; common.

G. boreale L. Northern Bedstraw. Wet meadows; occasional.

G. lanceolatum Torr. Wild Liquorice. Dry woods of the lower altitudes; common.

G. Claytoni Michx. Wet meadows; frequent.

G. erectum* Huds. Waste places; Charlotte, (Pringle); Bristol, (Dike); Westminster, (W. H. Blanchard).

G. kamtschaticum Steller. Cold wet woods of the higher mountains; frequent.

G. labradoricum Wiegand. Perch Pond bog, Pownal, (J. R. Churchill); Danby, (Mrs. N. F. Flynn).

G. lanceolatum Torr. Wild Liquorice. Dry woods of the lower altitudes; frequent.

G. Mollugo* L. Wild Madder. "North Pomfret," (Morgan); Shelburne, (Mrs. N. F. Flynn); Bellows Falls, Putney and Dummerston, (W. H. Blanchard).

G. palustre L. Wet meadows and along ditches; common.

G. pilosum Ait. Dry copses; Pownal, (Robbins, Eggleston); West Haven, (G. H. Ross).

G. sylvaticum* L. Scotch Mist, Baby's Breath. Established on shady ledge, Orwell, (Brainerd); Peacham, (Dr. F. Blanchard).

G. sylvestre* Pollick. Charlotte, (Pringle).

G. tinctorium L. Wet meadows; frequent.

G. trifidum L. Cold bogs and marshy borders of ponds; frequent.

G. triflorum Michx. Sweet-scented Bedstraw. Rich woodlands; common.

G. verum* L. Yellow Bedstraw. Occasionally introduced in grass lands.

HOUSTONIA

H. caerulea L. Bluets, Innocence. Grassy places and wet rocks; common.

H. longifolia Gaertn. Dry rocky places; frequent in the Champlain Valley. Randolph, (Bates).

MITCHELLA. Partridge Berry

M. repens L. Cool woods; common.

SHERARDIA. Field Madder

S. arvensis* L. Middlebury, (Brainerd).

CAPRIFOLIACEAE. HONEYSUCKLE FAMILY

DIERVILLA. Bush Honeysuckle

D. Lonicera Mill. (D. Diervilla [L.] MacM.). Rocky woodlands; common.

LINNAEA. Twin-flower

L. borealis L., var. **americana** (Forbes) Rehder. (L. americana Forbes). Cool rich woods; frequent.

LONICERA. Honeysuckle

L. caerulea L., var. **villosa** (Michx.) T. & G. Mountain Fly Honeysuckle. Cold bogs of northeastern Vermont; occasional. Norwich, (Jesup).

L. canadensis Marsh. American Fly Honeysuckle. Moist woods; common.

L. dioica L. Wild Honeysuckle. Dry rocky woods and sandy soil of the lower altitudes; frequent.

L. hirsuta Eat. Hairy Honeysuckle. Rocky woodlands of western Vermont; occasional.

L. oblongifolia (Goldie) Hook. Swamp Fly Honeysuckle. Cold bogs; occasional.

L. sempervirens L. Trumpet Honeysuckle. Townshend and Brattleboro, (Wheeler).

L. tatarica* L. Tartarian Honeysuckle. A frequent escape from cultivation.

SAMBUCUS. Elder

S. canadensis L. Common Elderberry. Thickets; common.

S. racemosa L. Red-berried Elder. Rocky woodlands; common.

SYMPHORICARPOS. Snowberry

S. racemosus Michx. Snowberry. Cliffs and headlands of western Vermont; occasional.

S. racemosus Michx., var. **laevigatus** Fernald. (S. Symphoricarpos [L.] MacM.). Garden Snowberry. Roadside escape.

TRIOSTEUM. Horse Gentian

T. aurantiacum Bicknell. Feverwort, Horse Gentian. Rich woodlands of the lower altitudes; occasional. North in the Connecticut Valley to Norwich.

VIBURNUM. Arrow-wood

V. acerifolium L. Maple-leaved Viburnum, Dockmackie. Dry rocky and sandy woods of the lower altitudes; common.

V. alnifolium Marsh. Hobblebush, Witch Hobble, Moosewood. Cold moist woods; common.

V. cassinoides L. Withe-rod, Wild Raisin. Swamps; common.

V. dentatum L. Arrow-wood. Wet places; frequent.

V. Lentago L. Sheepberry, Nannyberry, Sweet Viburnum. Rich moist woods and banks of the lower altitudes; frequent.

V. Opulus L., var. **americanum** (Mill.) Ait. Cranberry-tree, High-bush Cranberry, Pimbina. Low ground; frequent.

V. pauciflorum Raf. Squashberry, Pimbina. Moist ravines near limit of tree growth; Mt. Mansfield, (Tuckerman and Macrae); Killington Mt., (Sargent and Eggleston); Stratton Mt., (Underwood).

V. pubescens (Ait.) Pursh. Downy Arrow-wood. Common on the cliffs and rocky hills of the Champlain Valley.

VALERIANACEAE. VALERIAN FAMILY

VALERIANA. Valerian

V. officinalis* L. Garden Heliotrope. Garden escape, Franklin, (Wild); Burlington and Shelburne, (Mrs. N. F. Flynn).

V. uliginosa (T. & G.) Rydb. Cedar Swamp, Fairhaven, (Robbins, Seeley); Craftsbury, (Robbins).

DIPSACACEAE. TEASEL FAMILY

DIPSACUS. Teasel

D. sylvestris* Huds. Wild Teasel. Roadside weed; "Castleton," (Reed); Shoreham, (Brainerd); Charlotte, (Pringle).

KNAUTIA. (SCABIOSA)

K. arvensis* (L.) T. Coulter. Scabious. Charlotte, (Pringle).

CUCURBITACEAE. GOURD FAMILY

ECHINOCYSTIS. (MICRAMPELIS). Wild Balsam-apple

E. lobata (Michx.) T. & G. Wild Cucumber. Alluvial banks and waste places; frequent.

SICYOS. One-seeded Bur Cucumber

S. angulatus L. Star Cucumber. River banks and waste places; frequent.

CAMPANULACEAE. BLUEBELL FAMILY

CAMPANULA. Bellflower

C. aparinoides Pursh. Marsh Bellflower. Low sedgy thickets of the lower altitudes; occasional.

C. glomerata* L. Clustered Bellflower. Chittenden, (Mrs. Emily H. Terry).

C. rapunculoides* L. Bellflower. Roadside escape; occasional.

C. rotundifolia L. Harebell, Bluebell. Rocky banks; common.

C. Trachelium* L. Nettle-leaved Bellflower, Throatwort. Colchester, (Griffin).

C. uliginosa Rydberg. Low sedgy thickets of the lower altitudes; frequent.

SPECULARIA. (LEGOUZIA). Venus's Looking-glass

S. perfoliata (L.) A. DC. Dry rocky woodlands of the lower altitudes; occasional and local. Royalton, (Ward); Westminster, (W. H. Blanchard); South Burlington, (Mrs. N. F. Flynn).

LOBELIACEAE. LOBELIA FAMILY

LOBELIA

L. cardinalis L. Cardinal-flower. Swales and margins of ponds and streams; frequent. North in the Connecticut Valley to Hartland.

L. Dortmanna L. Water Lobelia. Shallow margins of ponds and bogs; occasional.

L. inflata L. Indian Tobacco. Fields and pastures; common.

L. Kalmii L. Cool moist rocks and fields; occasional

L. spicata Lam. Fields and waysides of the lower altitudes; occasional.

COMPOSITAE. COMPOSITE FAMILY

ACHILLEA. Yarrow

A. Millefolium L. Common Yarrow, Milfoil. Dry fields and roadsides; common.

A. Ptarmica L. Sneezeweed. Hartland, (Underwood).

AMBROSIA. Ragweed

A. artemisiifolia L. (A. elatior L.). Roman Worinwood, Hogweed, Bitter-weed. Waste places; common.

A. psilostachya DC. Introduced with western seed; Brandon, (Dutton); railroad yard, Burlington, (Mrs. N. F. Flynn).

A. trifida L. Great Ragweed. Moist alluvial soil; occasional. Var. **integrifolia** (Muhl.) T. & G. Burlington, (Mrs. N. F. Flynn).

ANAPHALIS. Everlasting

A. margaritacea (L.) B. & H. Pearly Everlasting. Dry hills and woods; common.

ANTENNARIA. Everlasting. Ladies' Tobacco

A. Brainerdii Fernald. Moist banks, usually in shade; occasional in the lower altitudes of central Vermont.

A. canadensis Greene. Dry and moist ground; common.

A. fallax Greene. In partial shade; occasional.

A. neglecta Greene. Indian Tobacco. Old fields; common.

A. neodioica Greene. Old pastures and fields; frequent.

A. neodioica Greene, var. **grandis** Fernald. Usually in shade; frequent.

A. occidentalis Greene. Meadows and hillsides; common in Addison County; Colchester, (Blake).

A. Parlinii Fernald. Dry banks and thickets of the lower altitudes; occasional.

A. petaloidea Fernald. Old pastures; common.

A. plantaginifolia (L.) Richards. Plantain-leaved Everlasting. Dry open woodlands of the lower altitudes; occasional.

ANTHEMIS. Chamomile

A. arvensis* L. Corn Chamomile. Westminster, Townshend, (W. H. Blanchard).

A. Cotula* L. Mayweed, Dog Fennel. Waste places; common.

A. tinctoria* L. Yellow Chamomile. Townshend, (W. H. Blanchard).

ARCTIUM. Burdock

A. Lappa* L. Great Burdock. Waste places; frequent, especially in mountain towns.

A. Lappa L., var. **purpurascens*** (Le Grand) Fernald. Rhod. 12: 45. Cornwall, (Brainerd).

A. minus* (Hill) Bernh. Common Burdock. Waste places; common.

ARTEMISIA. Wormwood

A. Abrotanum* L. Southernwood. Garden escape; Willoughby Lake, (Kennedy).

A. Absinthium* L. Wormwood. Dry hills and roadsides; occasional. Rare in the Connecticut Valley.

A. biennis Willd. Introduced along railways; occasional.

A. canadensis Michx. Willoughby Lake, (A. Wood); Smugglers' Notch, Mt. Mansfield, (Pringle); slaty shore of northern Lake Champlain, (Brainerd).

A. caudata Michx. Sandy shores of Lake Champlain; occasional.

A. ludoviciana Nutt. (A. gnaphalodes Nutt.). Western Mugwort, White Sage. Along railroad, Bellows Falls, (W. H. Blanchard).

A. pontica* L. Garden escape; Westmore, (Kennedy).

A. Stelleriana* Bess. Beach Wormwood, Dusty Miller. Occasional as a garden escape.

A. vulgaris* L. Common Mugwort. Waste places; common.

ASTER. Aster

A. acuminatus Michx. Cool rich woods; common.

A. amethystinus Nutt. Moist ground. "Brattleboro," (Frost); South Pownal, (Eggleston).

A. cordifolius L. Woodlands; common. Var. **Furbishiae** Fernald. Banks of streams; occasional. Var. **polycephalus** Porter. Johnson, (Grout).

A. divaricatus L. Moist woodlands; common.

A. ericoides L. Dry open places of the lower altitudes of southern Vermont; occasional. Var. **Pringlei** Gray. (A. Pringlei Britton). Slaty headlands and islands of Lake Champlain; frequent. Manchester, (Mary A. Day).

A. junceus Ait. Peat bogs; rare.

A. laevis L. Borders of woodlands of the lower altitudes of southern Vermont; frequent.

A. lateriflorus (L.) Britton. Thickets and fields; common.

A. lateriflorus (L.) Britton, var. **hirsuticaulis** (Lindl.) Porter. (A. *hirsuticaulis* Lindl.). Borders of thickets. "Bellows Falls," (Carey); Burlington, (Macrae, Mrs. N. F. Flynn); Highgate Springs, (Jesup); Brattleboro, (Grout).

A. linariifolius L. (*Ionactis linariifolius* Greene). Sandy soil of the lower altitudes; occasional.

A. Lindleyanus T. & G., var. **comatus** Fernald. Ripton, Bellows Falls, (W. H. Blanchard).

A. longifolius Lam. North Pownal, (Egglesston); Connecticut Valley, (W. H. Blanchard); Willoughby Lake, (Kennedy); Jamaica, (Wheeler). Var. **villicaulis** Gray. Connecticut Valley (W. H. Blanchard); West Concord, (Eggleston).

A. macrophyllus L. Moist woods; common. Var. **excelsior** Burgess. Frequent. Var. **pinguifolius** Burgess. Occasional. Var. **sejunetus** Burgess. Frequent. Var. **velutinus** Burgess. St. Johnsbury, (Inez A. Howe).

A. multiflorus Ait. Dry hilly pastures. Pownal, (Robbins, Eggleston); Vernon, (Grout). Var. **exiguus** Fernald. In railroad yard, Norwich, (H. E. Sargent).

A. nemoralis Ait. Rocky shores of North Pond, Brunswick, (Eggleston).

A. nemoralis Ait., var. **Blakei** Porter. Belden Pond, Johnson, (Grout).

A. novae-angliae L. New England Aster. Moist ground; common in western Vermont from Addison County southward; less so elsewhere. Var. **roseus** (Desf.) DC. Occasional.

A. novi-belgii L. Moist shady soil, Connecticut Valley; occasional.

A. paniculatus Lam. Shady moist soil; common. Var. **acutidens** Burgess. Westminster, (W. H. Blanchard). Var. **bellidifolius** (Willd.) Burgess. Rutland, (Eggleston); Willoughby Lake, (Kennedy). Var. **cinerascens** Fernald. Westminster, (W. H. Blanchard). Var. **lanatus** Fernald. Willoughby Lake, (E. F. Williams). Var. **simplex** (Willd.) Burgess. Westminster, (W. H. Blanchard); Rutland, (Kirk).

A. polyphyllus Willd. (A. *Faxonii* Porter). Willoughby Mountain, (Tuckerman, Faxon); "A dwarf form in pastures, Newark and Sutton," (E. Faxon); St. Johnsbury, (Inez A. Howe).

A. prenanthoides Muhl. Newfane, (Grout); Taftsville, (Nancy Darling).

A. ptarmicoides T. & G. Dry limestone ledges, Bennington County; occasional. West River, Jamaica; rare; (W. H. Blanchard).

A. puniceus L. Red-stalked Aster. Low thickets and swamps; common. Var. *demissus* Lindl. Occasional. Var. *firmus* (Nees) T. & G. Sudbury, (F. W. Hubby); Mt. Killington, (Kirk). Var. *lucidulus* Gray. Brandon, (Dutton).

A. radula Ait. "Brattleboro," (Frost); Cranberry Pond bog, Ferdinand, (Eggleson).

A. sagittifolius Wedemeyer. Dry ground. Common in the Hoosic Valley, Pownal, (Eggleson). Only known station in New England.

A. Schreberi Nees. Common in southern Vermont.

A. tardiflorus L. Moist shady ground; occasional. Var. *vestitus* Fernald. Westminster, (W. H. Blanchard); Hartland, (Nancy Darling); Willoughby Lake, (Kennedy).

A. Tradescanti L. Low grounds; occasional.

A. umbellatus Mill. (*Doellingeria umbellata* [Mill.] Nees). Moist thickets; common.

A. undulatus L. Dry copses of the lower altitudes; common.

A. vimineus Lam. Moist banks; occasional. Var. *foliolosus* (Ait.) Gray. Ledges, Sumner's Falls, Hartland, (Eggleson).

A. vimineus Lam., var. *saxatilis* Fernald. (*A. saxatilis* [Fernald] Blanchard). Ledges, Winooski River, Williston, (Pringle); Connecticut River, Bellows Falls to Brattleboro, (W. H. Blanchard).

BIDENS. Bur Marigold

B. Beckii Torr. (*Megalodonta Beckii* [Torr.] Greene). Water Marigold. Ponds and deep slow streams; occasional.

B. cernua L. Stick-tight. Wet places; common.

B. comosa (Gray) Wiegand. Wet shores; rare.

B. connata Muhl. Swamp Beggar-ticks. Low margins of streams and lakes; frequent.

B. discoidea (T. & G.) Britton. Maquam Bay, Swanton, (Blake).

B. frondosa L. Common Beggar-ticks. Moist waste places; common. Var. *anomala* Porter. Lake Bomoseen, (Kirk).

B. vulgata Greene. Beggar-ticks, Stick-tight. Waste ground; common.

CARDUUS. Plumeless Thistle

C. crispus* L. Curled Thistle. South Burlington, (Chittenden).

CENTAUREA. Star Thistle

C. Cyanus* L. Bluebottle, Bachelor's Button, Corn-flower. Occasionally adventive.

C. Jacea* L. Meadow Centaury. Charlotte, (Pringle); Stowe, (Mrs. Carrie E. Straw).

C. Jacea L., var. *lacera** Koch. Berkshire, (Mrs. Frances Jolley).

CHRYSANthemum. Ox-Eye Daisy

C. Leucanthemum L., var. *pinnatifidum** Lecoq and Lamotte. Fields and meadows; common.

CICHORIUM. Succory or Chicory

C. Intybus* L. Common Chicory, Blue Sailors. Roadsides and meadows; more common in western Vermont.

CIRSIUM. Common or Plumed Thistle

C. arvense* (L.) Scop. Canada Thistle. Fields and waste places; common.

C. canum* (L.) Bieb. Castleton, (A. E. Higley).

C. discolor (Muhl.) Spreng. Field Thistle. Copses of the lower altitudes of southern Vermont; occasional.

C. lanceolatum* (L.) Hill. Common or Bull Thistle. Pastures and roadsides; common.

C. muticum Michx. Swamp Thistle. Swamps and low woods; frequent.

C. pumilum (Nutt.) Spreng. (*C. odoratum* [Muhl.] Britton). Pasture or Bull Thistle. The most common pasture thistle of the southern counties of western Vermont; unknown north of Rutland County.

CREPIS. Hawk's Beard

C. biennis* L. Charlotte, (Pringle).

C. capillaris* (L.) Wallr. (*C. virens* L.). Townshend, (W. H. Blanchard); Stowe, (Mrs. Carrie E. Straw).

C. setosa* Haller. Townshend, (W. H. Blanchard).

DYSSODIA. (BOEBERA). Fetid Marigold

D. papposa (Vent.) Hitchc. Adventive on wool waste, bank of Winooski River, Burlington, (Brainerd).

ERECHTITES. Fireweed

E. hieracifolia (L.) Raf. Moist woods, especially in recent clearings; common.

ERIGERON. Fleabane

E. annuus (L.) Pers. Daisy Fleabane, Sweet Scabious. Fields and waste places; common.

E. canadensis L. (*Leptilon canadense* [L.] Britton). Horse-weed, Butter-weed. Waste places; common.

E. hyssopifolius Michx. Moist rocky river banks and mountain cliffs; occasional.

E. philadelphicus L. Daisy Fleabane. Moist ground; common.

E. pulchellus Michx. Robin's Plantain. Copses and moist banks; common.

E. ramosus (Walt.) BSP. Daisy Fleabane. Fields; common.

EUPATORIUM. Thoroughwort

E. perfoliatum L. Boneset, Thoroughwort. Low grounds; common.
 Var. **truncatum** Gray. Hartland, (Underwood); Colchester, (Blake).

E. purpureum L. Joe-Pye Weed, Trumpet Weed. Essex Junction, North Ferrisburgh, (Blake); Highgate, (Blewitt).

E. purpureum L., var. **amoenum** (Pursh.) Gray. Dry open woods, Pownal, (Eggleston).

E. purpureum L., var. **foliosum** Fernald. Essex Junction, (Blake).

E. purpureum L., var. **maculatum** (L.) Darl. (E. maculatum L.). Joe-Pye Weed, Trumpet Weed. Moist thickets and low grounds; common.

E. sessilifolium L. Upland Boneset. Dry open woods about base of cliff, North Pownal, (Eggleston).

E. urticaefolium Reichard. White Snakeroot. Moist rich woods; common.

GALINSOGA .

G. parviflora Cav., var. **hispida*** DC. Becoming common as a garden weed.

GNAPHALIUM. Cudweed

G. decurrens Ives. Everlasting. Hillsides; common.

G. polyccephalum Michx. (G. obtusifolium L.?). Common Everlasting. Old fields and woods; common.

G. uliginosum L. Low Cudweed. Moist soil; common.

HELIANTHUS. Sunflower

H. annuus L. Common Sunflower. An occasional escape.

H. decapetalus L. Wild Sunflower. Copses and low banks of streams; frequent.

H. divaricatus L. Thickets and barrens of the lower altitudes; frequent.

H. giganteus L. "Brattleboro," (Frost); Randolph, (Bates); "Royalton," (Ward).

H. petiolaris Nutt. Adventive, Burlington, (Helyer); St. Johnsbury, (Inez A. Howe).

H. strumosus L. Dry woods and banks of the lower altitudes of western Vermont; occasional.

H. tuberosus L. Jerusalem Artichoke. Along fences and roadsides; frequent.

HELIOPSIS. Ox-Eye

H. helianthoides (L.) Sweet. North Pownal, (Woodward); Lyndon, (Inez A. Howe).

H. seabra Dunal. Franklin, (Wild); Hartford and Norwich, (H. E. Sargent); Burlington, (Jones); Shelburne, (Mrs. Gebhardt).

HIERACIUM. Hawkweed

H. aurantiacum* L. Orange Hawkweed, Devil's Paint-brush, Grim the Collier. Common. A weed pest in pastures and lawns, especially in the northwestern counties.

H. canadense Michx. Dry cool woods; frequent.

H. florentinum* All. King Devil. Burlington, (Mrs. N. F. Flynn); Colchester, (Griffin); Rutland and Sherburne, (Kirk).

H. floribundum* Wimm. & Grab. Franklin, (Underwood); Brattleboro, (Wheeler).

H. mariannum Willd. Bellows Falls, (W. H. Blanchard).

H. paniculatum L. Open woods; frequent.

H. Pilosella* L. Mouse-ear. Grassland; rare.

H. praealtum Gochnat, var. **decipiens*** Koch. South Burlington, (Mrs. Jane Walker).

H. pratense* Tausch. King Devil. Berkshire, (Mrs. Frances Jolley).

H. scabrum Michx. Dry open woods; common.

H. venosum L. Rattlesnake-weed, Poor Robin's Plantain. Dry plains and pine woods of the lower altitudes; occasional.

H. vulgatum* Fries. Common in woods near Evergreen Cemetery, Rutland, (Kirk).

INULA. Elecampane

I. Helenium* L. Elecampane. Roadsides and damp pastures; frequent.

IVA. Marsh Elder. Highwater Shrub

I. xanthifolia Nutt. Adventive. Manchester, (Mrs. Mary C. Munson); Stowe, (Mrs. Carrie E. Straw).

KRIGIA. (CYNTHIA). Dwarf Dandelion

K. virginica (L.) Willd. Dry sterile soil of the Connecticut Valley; occasional.

LACTUCA. Lettuce

L. canadensis L. Wild Lettuce, Horse-weed. Rich damp soil, borders of fields and thickets; common. Var. **montana** Britton. Burlington, (Mrs. N. F. Flynn).

L. hirsuta Muhl. Charlotte, (Pringle).

L. integrifolia Bigel. (L. sagittifolia Ell.). Newfane, (Grout); Pownal, (Egglesston); Middlebury, (Brainerd).

L. scariola L., var. **integrata*** Gren. & Godr. (L. virosa L.). Prickly Lettuce. Waste places; spreading rapidly.

L. spicata (Lam.) Hitchc. Wild Blue Lettuce. Low ground; common.

LAPSANA. (LAMPSANA). Nipplewort

L. communis* L. Brattleboro, (Frost); Ferrisburgh and Rutland, (Kirk); Townshend, (W. H. Blanchard).

LEONTODON. (APARGIA). Hawkbit

L. autumnalis* L. Fall Dandelion. Abundant on village green, Irasburgh, (Hazen); Rutland, (Kirk).

MATRICARIA. Wild Chamomile

M. suaveolens* (Pursh.) Buchenau. (*M. matricarioides* [Less.] Porter). Pineapple-weed. Adventive from Pacific coast. Abundant along railroads and highways in many places.

ONOPORDUM. Cotton or Scotch Thistle

O. Acanthium* L. Cotton Thistle. "Dry pastures, Williston and Grand Isle," (Robbins); Charlotte, (Pringle); Williston, (Mrs. N. F. Flynn).

PETASITES. Sweet Coltsfoot

P. palmatus (Ait.) Gray. Wooded borders of cold swamps and streams; occasional.

PICRIS

P. echiooides* L. Ox-tongue. Hartland, (Webster).
P. hieracioides* L. Charlotte, (Pringle).

POLYMNIA. Leafcup

P. canadensis L. Limestone ledges, Rutland and Proctor, (Eggleston).

PRENANTHES. (NABALUS). Rattlesnake-Root

P. alba L. White Lettuce, Rattlesnake-root. Borders of rich woods of the lower altitudes of western Vermont; occasional. Vernon, (Grout); West River, (Wheeler).

P. altissima L. Gall-of-the-earth. Rich moist woods; common. Var. *hispidula* Fernald. Monkton, (Pringle).

P. Boottii (DC.) Gray. Mansfield Chin and Nose, (Pringle).

P. nana (Bigel.) Torr. Top of Willoughby Mt., (Rusby).

P. racemosa Michx. Along railroad, Swanton, (Blake).

P. trifoliata (Cass.) Fernald. Gall-of-the-earth. Dry sterile soil; frequent.

RUDBECKIA. Cone-flower

R. hirta L. Yellow Daisy, Black-eyed Susan, Nigger-head. Meadows; common.

R. laciniata L. Tall Cone-flower, Thimble-weed. Low thickets; frequent.

SENECIO. Groundsel. Ragwort. Squaw-weed

S. aureus L. Golden Ragwort. Swamps; common.

S. Balsamitae Muhl. (*S. pauperculus* Michx.). Moist cliffs and rocky banks of streams; frequent.

S. Balsamitae Muhl., var. *praelongus* Greenman. Manchester, (Mary A. Day); Essex, (F. A. Ross); Burlington, (Jones).

S. obovatus Muhl. Dry open woods; Bennington and Pownal, common, (Robbins, Churchill); Essex, (F. A. Ross); Townshend, (Wheeler).

S. Robbinsii Oakes. Common in the cold swamps of northern and central Vermont. Summit of Ascutney Mt. and Windham, (W. H. Blanchard); Hartland, (Nancy Darling); Rutland, (Eggleson).

S. vulgaris* L. Common Groundsel. Garden weed; occasional.

SERICOCARPUS. White-topped Aster

S. asteroides (L.) BSP. Dry open woods. Pownal and Arlington, (Robbins); Vernon, (Grout); Brattleboro, (W. H. Blanchard).

SILPHIUM. Rosin-weed

S. perfoliatum L. Cup Plant. Burlington, (Jones); Westminster, (W. H. Blanchard).

SOLIDAGO. Golden-rod

S. altissima L. (*S. canadensis*, Gray's Manual, ed. 6 in part). Copses of the lower altitudes; occasional.

S. altissima L., var. *procera* (Ait.) Fernald. Manchester, (Mary A. Day).

S. arguta Ait. Copses and moist woods of the lower altitudes; common.

S. bicolor L. White Golden-rod. Dry copses; common.

S. caesia L. Rich woodlands of the lower altitudes; common. Var. *axillaris* (Pursh) Gray. Burnt over woodlands; common. Var. *paniculata* Gray. Rich woods; occasional.

S. canadensis L. (*S. canadensis* L., var. *glabrata* Porter). Borders of thickets and fields; common.

S. canadensis L., var. *gilvoaneascens* Rydb. St. Johnsbury, (Inez A. Howe).

S. Cutleri Fernald. (*S. Virgaurea*, var. *alpina* Bigel.). Mt. Mansfield and Camel's Hump, (Brainerd); Mt. Horrid, (Dutton); Lunenburg, (W. E. Balch).

S. graminifolia (L.) Salisb. (*Euthamia graminifolia* [L.] Nutt.). Moist soil; common.

S. hispida Muhl. Dry sterile soil; occasional. More abundant in northern Vermont.

S. juncea Ait. Copses and banks of the lower altitudes; common. Var. *scabrella* (T. & G.) Gray. More rocky situations than type; common.

S. latifolia L. (*S. flexicaulis* L. in part). Moist shaded banks; frequent.

S. macrophylla Pursh. Highest peaks of the Green Mountains; common above 3,000 feet.

S. neglecta T. & G. Bogs and swamps of the lower altitudes; occasional.

S. nemoralis Ait. Dry sterile fields; common.

S. odora Ait. Sweet Goldenrod. "Woods," (Oakes); Vernon, rare, (W. H. Blanchard).

S. patula Muhl. Swamps; frequent in Bennington and Rutland Counties.

S. puberula Nutt. Sandy soil of the lower altitudes; occasional.

S. racemosa Greene. (*S. humilis* Gray's Manual, ed. 6 in part, not Pursh). Rock banks of lakes and streams; occasional.

S. Randii (Porter) Britton. (*S. Virgaurea* and var. *Redfieldii* Porter). Shady cliffs of the quartzite range of the Green Mountains, at an altitude of 1,000-2,000 feet; cliffs of Mt. Mansfield and Willoughby Mountain; headlands of Lake Champlain; common. Var. *monticola* (Porter) Fernald. Cliffs, Mt. Mansfield and Willoughby Mt.; common.

S. rugosa Mill. Borders of fields and copses; common.

S. serotina Ait. Copses and fencerows of the lower altitudes; common.

S. serotina Ait., var. *gigantea* (Ait.) Gray. Low grounds and moist thickets; frequent.

S. squarrosa Muhl. Rocky woods; occasional.

S. uliginosa Nutt. Peat bogs; occasional.

S. ulmifolia Muhl. About base of the cliffs, North Pownal, (Eggles-ton); Hartland, (F. P. Whiting).

S. macrophylla x **rugosa** Fernald. Near summit of Mt. Killington, (Dutton and Kirk).

SONCHUS. Sow Thistle

S. arvensis* L. Field Sow Thistle. Shores and waste places, becoming frequent.

S. asper* (L.) Hill. Spiny-leaved Sow Thistle. Waste places in rich soil; frequent.

S. oleraceus* L. Common Sow Thistle. Waste places with the preceding.

TANACETUM. Tansy

T. vulgare* L. Common Tansy. Roadsides; frequent. Var. *crispum** DC. With the species; frequent.

TARAXACUM. (LEONTODON). Dandelion

T. erythrospermum* Andrz. Red-seeded Dandelion. Shallow soil about ledges; frequent.

T. officinale* Weber. (L. *Taraxacum* L.). Common Dandelion. Common. Var. *palustre** (Sm.) Blytt. Rutland, (Eggles-ton).

TRAGOPOGON. Goat's Beard

T. pratensis* L. Waste places; frequent.

TUSSILAGO. Coltsfoot

T. Farfara* L. Moist clay banks and along mountain streams; common.

XANTHIUM. Cocklebur

X. canadense Mill. (*X. americanum* Walt.). Shores of lakes and rivers; frequent.

X. commune Britton. Shores of Lake Champlain; common.

X. echinatum Murr. Lake shores and river banks; common.

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